

GENERAL LIBRARY
JAN 20 1921
UNIV. OF MICH.

JAN 1 1921

U. S. DEPARTMENT OF LABOR
W. B. WILSON, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

MONTHLY LABOR REVIEW

Vol. XI, No. 6

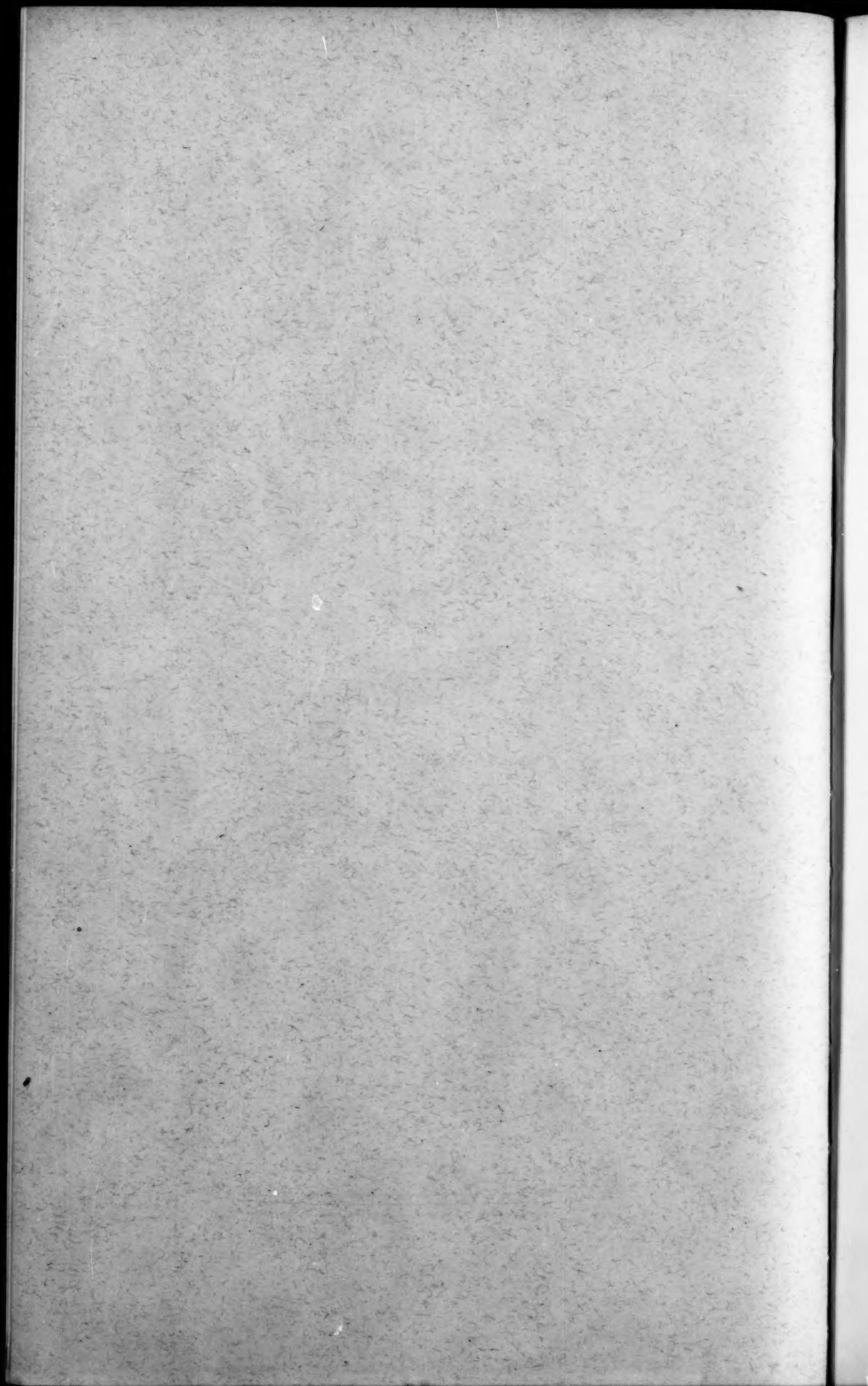


December, 1920

SPECIAL FEATURES IN THIS ISSUE

A plea for more adequate accident compensation rates
Separations from the Government service
Portland (Oregon) plan of preventing industrial disputes
Comparison of compensation insurance systems as to
cost, security, and service
Settlement of strike of British coal miners
Attitude of Department of Labor toward admission of
Chinese industrial students
Labor disturbances in Italian iron and steel industry

WASHINGTON
GOVERNMENT PRINTING OFFICE
1920



MONTHLY LABOR REVIEW

VOL. XI—NO. 6

WASHINGTON

DECEMBER, 1920

A Plea for More Adequate Accident Compensation Rates.

By ETHELBERG STEWART, UNITED STATES COMMISSIONER OF LABOR STATISTICS.

AS MANY of the State legislatures will hold sessions during this winter, it seems important to call attention to that portion of the workmen's compensation laws of the various States which regulates the relation between the wages of the injured employee and the compensation for injury which he may receive under the law.

It will probably be admitted that compensation was never entirely adequate, even under the economic conditions obtaining at the time the laws were passed. The inadequacy of the proposed compensation was the basis of the objection to compensation legislation raised by most of the workmen's organizations that opposed it. It was claimed that while this legislation relieved workmen from the uncertainty of the old employers' liability laws, it did not render adequate compensation. Many of the organizations, particularly railway employees' unions, insisted—and some of them still insist—that they preferred to take a chance of obtaining adequate compensation for injury under the old liability law with all of its quibbles and enormous attorney fees rather than to submit to the dole under the compensation laws.

On the other hand, the whole scheme was experimental in this country, and it was necessary to have rigid safeguards before the manufacturing interests could be induced to agree to have the experiment tried. The employers naturally felt that they must know just what proportion of the loss from industrial injuries they would be expected to carry and as nearly as possible the amount of that loss. With them it was figured on percentage of pay roll. With the workmen it was figured on the percentage of earnings. Between these conflicting interests the State legislatures were called upon to enact such bills as would be acceptable to both sides or meet with the least resistance from them. As usual in such cases, the public, as far as it knew or was interested in the matter, assumed that the legislatures had done the perfectly equitable thing, whereas as a matter of fact the legislatures had as usual done the only possible thing at that time.

These laws, as is well known, provided what may be termed a double check upon the payment of compensation to the injured. For instance, the New York law provided that for temporary total disability a workman should receive not more than 66⅔ per cent of his wages, but it also fixed the weekly maximum at \$15; that is to say, a workman temporarily totally disabled, coming under the law, received two-thirds of his wages as compensation for his injury,

provided that two-thirds did not exceed \$15 a week. Many of the laws provided for 50 per cent with a maximum of \$10, and some even lower than this. This double check operated to reduce the payments to injured men far below the point of reasonable adequacy, and threw a very much greater percentage of the cost of industrial accidents upon the workers than was apparent in the reading of the laws themselves. Mr. E. H. Downey, compensation actuary of the Pennsylvania Insurance Department, brings this out very forcefully. He says:

State officials, employers, legislators, and the public have been very complacent with respect to the American compensation system. The public press, as also most discussions of the subject, leave the impression that the nominal percentage of wages expressed in the compensation acts represent the actual relationship between compensation and wage loss. So in the legislative hearings in Pennsylvania it was repeatedly emphasized that the act of 1915 aimed to divide the cost of industrial accidents equally as between employers and employees, and the amendments of 1919 were objected to on the ground that the nominal 60 per cent would increase the employer's share to three-fifths. *The bold fact is that on any reasonable estimate of wage loss the benefits payable under the Pennsylvania compensation act of 1919 will amount to not more than 20 per cent of the economic cost of industrial accidents, to say nothing of occupational diseases. The individual wage earner and his family in Pennsylvania still bear not one-half but four-fifths of the wage loss incident to industrial injuries. Even in New York, industry pays much less than half of the direct economic loss imposed by work injuries upon wage earners. These facts should be brought forcibly before the public and nothing will make the facts so vivid as a tabulation of compensation in relationship to wage loss.*

Effect of Present Statutory Provisions Upon Disabled Workers.

THE changed economic and industrial conditions in this country since the passage of practically all of the compensation laws have served to increase and accentuate this inequality and to widen the spread between the earning power of the worker and his compensation in case of an industrial accident or injury resulting in temporary total disability. It is true that some of the States have slightly increased the statutory percentage and some have slightly increased the weekly maximum, but in no case has the change been at all commensurate with the increased earning power of the worker. Even in the most liberal of the States the workman now receives a very much smaller percentage of his wages and the total cost of compensation to the employing group is a very much less per cent of the total pay roll than in 1916. Let us take, for instance, the State of New Jersey. In 1916 the statutory percentage was 50 per cent; the weekly maximum \$10 per week. A structural-iron worker working in Newark in 1916 if totally disabled by an accident would receive 33 per cent of his wages under the compensation law. In 1920 the statutory provisions had been changed to 66 $\frac{2}{3}$ per cent, the weekly maximum raised to \$12 a week. However, the structural-iron worker's wages had increased in 1920 to \$49.50 per week, so that whereas he would have received 33 per cent of his wages in 1916, in 1920 he received but 24.2 per cent. Not only that, but he received the \$12 maximum in 1920, which had been reduced in purchasing power by the increased cost of the necessities of life by at least 50 per cent. At the same time the industry was paying a much smaller per cent of its total pay roll to carry the burden of industrial accident costs.

This latter phase of the problem works special hardship in the cases of permanent total disability adjusted during the past years and also in the cases of benefits where the adjustment has been made and the compensation rate awarded to the widow in past years. We have, for instance, a \$12 per week compensation granted, let us say, in 1914, which, assuming that it was worth \$12 at that time, is now worth in purchasing power somewhere between \$6 and \$7.

It must be clear to the friends of compensation legislation in State legislatures that a long continuance of this ever-increasing inadequacy of compensation will tend alarmingly to increase the discontent growing up under these laws and to revive the suspicion that was originally aimed at them.

If it is agreed that the statutory percentage is a fair division of the burden as between the employer and the employee, then the question of the justice of removing the complications caused by the weekly maximum is one that it would seem might be fair to consider. The effect of this weekly maximum in the several States in reducing the statutory percentages for specified occupations is rather startling, as will be shown in the tabular presentations accompanying this article. If a workman injured as a result of his employment to the extent of being temporarily totally disabled for a longer or shorter period of time is entitled to collect from the industry 60 per cent of his wages, and his contribution to the cost of the accident or injury of 40 per cent of his earning power is a fair proportion, then why should a weekly maximum be imposed which prevents him from receiving 60 per cent of his earning capacity and requires him to shoulder more than 40 per cent of the cost? If the percental theory of these laws is fair, then the weekly maximum theory is not fair, and operates only to defeat the ends of justice.

Another problem which might well receive attention from the coming State legislatures in case of reconsideration or amendments to the compensation acts is that of a retroactive increase in the compensation or award. This presents no more technical or administrative difficulty than arises when the coal commission grants a percental increase on the wages of the miners and makes it retroactive over a period of seven or eight months. As a matter of fact, a special session of the Oregon Legislature in June, 1920, provided for a flat increase of 30 per cent in compensation rates and made this increase retroactive, applying to all adjudications made by the compensation commission of that State since the beginning of its activities if final settlement has not been made. The Oregon compensation commission is finding no serious difficulty in administering this law.

Effect of Weekly Maximum in Reducing Statutory Percentages.

TO PRESENT more clearly the general situation as here outlined, I have had certain tables¹ prepared in the Bureau of Labor Statistics. The general purpose running through the tables is to show the effect of the weekly maximum in the several States in reducing statutory percentages.

¹ The tables used in this article have been prepared by or under the supervision of Mr. Carl Hookstadt, compensation expert of the U. S. Bureau of Labor Statistics.

Table 1 shows in the second column the statutory weekly maximum compensation as at present operative. As against this is shown the standard wages received in 1920 by workers in selected occupations.

TABLE 1.—COMPARISON OF STATUTORY WEEKLY MAXIMUM COMPENSATION AND STANDARD WAGES RECEIVED IN 1920 BY SPECIFIED OCCUPATIONS.

State and city.	Statutory weekly maximum.	Standard wages received in 1920.							
		Bricklayers.	Carpenters.	Machinists, manufacturing shops.	Molders, iron.	Painters.	Plasterers.	Sheet-metal workers.	Structural-iron workers.
Alabama (Birmingham).....	{ ¹ \$12.00 ² 15.00}	\$44.00	\$33.00	\$37.68	\$38.40	\$38.50	\$33.00	\$44.00	\$44.00
California (San Francisco).....	20.83	55.00	46.77	39.60	38.72	46.77	50.00	49.50	49.50
Colorado (Denver).....	10.00	55.00	49.50	34.56	38.40	55.00	55.00	44.00	44.00
Connecticut (New Haven).....	14.00	44.00	44.00	38.40	(³)	38.50	44.00	38.50	46.77
Illinois (Chicago).....	{ ¹ 12.00 ² 15.00}	55.00	55.00	44.00	50.40	55.00	55.00	55.00	55.00
Indiana (Indianapolis).....	13.20	55.00	45.00	36.00	43.20	40.00	38.50	44.00	55.00
Kentucky (Louisville).....	15.00	50.60	35.20	(³)	39.84	33.00	44.00	35.20	44.00
Louisiana (New Orleans).....	18.00	44.00	36.00	38.40	38.40	33.00	45.00	44.00	44.00
Maryland (Baltimore).....	18.00	56.25	39.60	36.00	45.02	39.60	49.50	35.20	55.00
Massachusetts (Boston).....	16.00	44.00	40.00	43.20	43.20	40.00	40.00	44.00	44.00
Michigan (Detroit).....	14.00	55.00	44.00	52.80	48.00	55.00	55.00	55.00	55.00
Minnesota (Minneapolis).....	15.00	55.00	44.00	39.60	47.25	44.00	49.50	44.00	38.50
Nebraska (Omaha).....	15.00	55.00	49.50	40.80	40.80	44.00	49.50	44.00	50.60
New Hampshire (Manchester).....	10.00	49.50	49.50	24.00	34.80	35.20	49.50	20.99	44.00
New Jersey (Newark).....	12.00	55.00	44.00	36.00	42.24	44.00	55.00	44.00	49.50
New York (New York).....	20.00	55.00	49.50	43.20	42.24	45.00	52.27	49.50	49.50
Ohio (Cleveland).....	15.00	55.00	55.00	37.50	43.20	49.50	55.00	55.00	55.00
Oregon (Portland).....	{ ¹ 13.49 ² 22.50}	55.00	44.00	38.72	41.27	44.00	49.50	44.00	49.50
Pennsylvania (Pittsburgh).....	12.00	49.50	39.60	(³)	45.02	49.50	50.60	39.60	44.00
Rhode Island (Providence).....	14.00	50.60	44.00	(³)	(³)	39.60	40.00	44.00	44.00
Tennessee (Memphis).....	11.00	55.00	44.00	48.00	44.28	44.00	44.00	44.00	44.00
Texas (Dallas).....	15.00	49.50	44.00	38.40	(³)	44.00	49.41	44.00	44.00
Utah (Salt Lake City).....	16.00	55.00	49.50	42.00	42.00	44.00	55.00	44.00	49.50
Virginia (Richmond).....	12.00	45.00	34.08	36.00	38.40	31.20	33.00	42.24	44.00
Washington (Seattle).....	{ ¹ 6.92 ² 12.12}	55.00	44.00	38.72	38.72	40.00	50.00	44.00	49.50
Wisconsin (Milwaukee).....	14.63	55.00	37.40	36.00	(³)	37.40	38.50	32.40	44.00

¹ With no dependents.

² Maximum with dependents.

³ No scale given.

The weekly wages here shown are the standard union rates of wages as of May 15, 1920, converted to a weekly wage for bricklayers, carpenters, machinists, molders, painters, plasterers, sheet-metal workers, and structural-iron workers. These wages are computed from union wage scales as regularly published by the United States Bureau of Labor Statistics. It may be said that some States do not base their compensation upon the earnings of only one week, but seek to get the average of earnings extending over a longer period. It may also be said that the minimum hourly rate of pay as indicated in the union scales does not at this time represent actual earnings in these occupations, as a very large proportion of the men in these occupations are earning more than the union scale. In reply to the latter objection the answer is that the extent to which these occupations would earn more than is shown in the table is the percentage of their earnings reduced in case of accident by the operation of the maximum weekly amount allowable under the compensation law. To

the first objection it may be said that whatever the basis of computation, wages of workmen have increased in all industries, the percentage of increase being very much greater in the case of common and unskilled labor than in the case of the skilled occupations which are here used as examples. It is believed that the general situation as shown by the following tables will apply, with only fractional variations in the percentage, to any line of industry and to any equitable method for computing the basis for compensation award.

Table 2 shows the statutory percentage as found in the compensation law of each State and the actual percentage which the workmen in the various occupations shown in Tables 1 and 2 would receive as the result of the application of the maximum weekly payments.

TABLE 2.—COMPARISON OF STATUTORY AND ACTUAL PERCENTAGES OF WAGES RECEIVED AS COMPENSATION, FOR 1920, BY SPECIFIED OCCUPATIONS.

State and city.	Statutory percentage.	Actual percentage weekly maximum compensation is of wages.							
		Bricklayers.	Carpenters.	Machinists, manufacturing shops.	Molders, iron.	Painters.	Plasterers.	Sheet-metal workers.	Structural iron workers.
Alabama (Birmingham).....	{ ¹ 50.0 ² 60.0	¹ 27.3 ² 34.1	¹ 36.4 ² 45.5	¹ 31.8 ² 39.8	¹ 31.2 ² 39.1	¹ 31.2 ² 39.0	¹ 36.4 ² 45.5	¹ 27.3 ² 34.1	¹ 27.3 ² 34.1
California (San Francisco).....	65.0	37.9	44.5	52.6	53.8	44.5	41.7	42.1	42.1
Colorado (Denver).....	50.0	18.2	20.2	28.9	26.0	18.2	18.2	22.7	22.7
Connecticut (New Haven).....	50.0	31.8	31.8	36.5	(³)	36.4	31.8	36.4	29.9
Illinois (Chicago).....	{ ¹ 50.0 ² 65.0	¹ 21.8 ² 27.3	¹ 21.8 ² 27.3	¹ 27.3 ² 34.1	¹ 23.8 ² 29.8	¹ 21.8 ² 27.3	¹ 21.8 ² 27.3	¹ 21.8 ² 27.3	¹ 21.8 ² 27.3
Indiana (Indianapolis).....	55.0	24.0	29.3	36.7	30.5	33.0	34.3	30.0	24.0
Kentucky (Louisville).....	65.0	29.6	42.6	(³)	37.6	45.5	34.1	42.6	34.1
Louisiana (New Orleans).....	60.0	40.9	50.0	46.9	46.9	54.5	40.0	40.9	40.9
Maryland (Baltimore).....	66.7	32.0	45.5	50.0	40.0	45.5	36.4	51.1	32.7
Massachusetts (Boston).....	66.7	36.4	40.0	37.0	37.0	40.0	40.0	36.4	36.4
Michigan (Detroit).....	60.0	25.5	31.8	26.5	29.2	25.5	25.5	25.5	25.5
Minnesota (Minneapolis).....	66.7	27.3	34.1	37.9	31.7	34.1	30.3	34.1	39.0
Nebraska (Omaha).....	66.7	27.3	30.3	36.8	36.8	34.1	30.3	34.1	29.6
New Hampshire (Manchester).....	50.0	20.2	20.2	41.7	28.7	28.4	20.2	47.6	22.7
New Jersey (Newark).....	66.7	21.8	27.3	33.3	28.4	27.3	21.8	27.3	24.2
New York (New York).....	66.7	36.3	40.4	46.3	47.3	44.4	38.3	40.4	40.4
Ohio (Cleveland).....	66.7	27.3	27.3	40.0	34.7	30.3	27.3	27.3	27.3
Oregon (Portland).....	(⁴)	{ ¹ 24.5 ² 40.9	{ ¹ 30.7 ² 51.1	{ ¹ 34.8 ² 58.1	{ ¹ 32.7 ² 54.5	{ ¹ 30.7 ² 51.1	{ ¹ 27.3 ² 45.5	{ ¹ 30.7 ² 51.1	{ ¹ 27.3 ² 45.5
Pennsylvania (Pittsburgh).....	60.0	24.2	30.3	(³)	26.7	24.2	23.7	30.2	27.3
Rhode Island (Providence).....	50.0	27.7	31.8	(³)	(³)	35.4	35.0	31.8	31.8
Tennessee (Memphis).....	50.0	20.0	25.0	22.9	24.8	25.0	25.0	25.0	25.0
Texas (Dallas).....	60.0	30.3	34.1	39.1	(³)	34.1	30.4	34.1	34.1
Utah (Salt Lake City).....	60.0	29.1	32.3	38.1	38.1	36.4	29.1	36.4	32.3
Virginia (Richmond).....	50.0	26.7	35.2	33.3	31.3	38.5	36.4	28.4	27.3
Washington (Seattle).....	(⁴)	{ ¹ 12.6 ² 22.0	{ ¹ 15.7 ² 27.5	{ ¹ 17.8 ² 31.0	{ ¹ 17.8 ² 31.0	{ ¹ 17.3 ² 30.3	{ ¹ 13.8 ² 24.2	{ ¹ 15.7 ² 27.5	{ ¹ 14.0 ² 24.5
Wisconsin (Milwaukee).....	65.0	26.6	30.1	40.6	(³)	39.1	38.0	45.1	33.3

¹ With no dependents.

² Maximum with dependents.

³ No scale given.

⁴ A flat monthly pension not based on wages.

Let us take, for instance, the State of Colorado. Table 1 shows the statutory weekly maximum to be \$10. It shows that in Denver bricklayers received \$55 per week, carpenters \$49.50, structural ironworkers \$44, etc. Table 2 shows that the statutory percentage is 50, but notwithstanding that fact, and as a result of this statutory

weekly maximum, a bricklayer temporarily totally disabled while at work in Denver would receive but 18.2 per cent of his weekly wages as compensation, a structural-iron worker 22.7 per cent, etc.

In Table 3 is shown the results of such legislation and commission regulations as have attempted to meet the increasing inadequacy of compensation growing out of the rise in wages.

TABLE 3.—COMPARISON OF STATUTORY AND ACTUAL PERCENTAGES OF WAGES RECEIVED AS COMPENSATION BY STRUCTURAL-IRON WORKERS FOR SPECIFIED YEARS.

State and city.	Weekly maximum compensation.		Statutory percentage of compensation.		Per cent of wages actually received as compensation.			
	1916	1920	1916	1920	1916	1917	1919	1920
Alabama (Birmingham).....	(¹)	{ ² \$12.00 ³ 15.00 }	(¹)	{ ² 50.0 ³ 60.0 }	(¹)	(¹)	(¹)	{ ² 27.3 ³ 34.1 }
California (San Francisco).....	\$20.83	20.83	65.0	65.0	63.1	63.1	47.3	42.1
Colorado (Denver).....	8.00	10.00	50.0	50.0	29.1	25.9	26.0	22.7
Connecticut (New Haven).....	10.00	14.00	50.0	50.0	36.4	50.0	34.4	29.9
Illinois (Chicago).....	12.00	{ ² 12.00 ³ 15.00 }	50.0	{ ² 50.0 ³ 65.0 }	40.1	{ ² 39.5 ³ 49.4 }	² 31.2 ³ 39.0	² 21.8 ³ 27.3
Indiana (Indianapolis).....	13.20	13.20	55.0	55.0	42.9	40.0	35.3	24.0
Kentucky (Louisville).....	12.00	15.00	65.0	65.0	54.5	45.5	34.1	34.1
Louisiana (New Orleans).....	10.00	18.00	50.0	60.0	36.4	36.4	54.5	40.9
Maryland (Baltimore).....	12.00	18.00	50.0	66.7	43.6	43.6	27.3	32.7
Massachusetts (Boston).....	10.00	16.00	66.7	66.7	36.4	46.3	45.4	36.4
Michigan (Detroit).....	10.00	14.00	50.0	60.0	35.0	35.0	35.4	25.5
Minnesota (Minneapolis).....	11.00	15.00	50.0	66.7	40.0	43.6	39.0	39.0
Nebraska (Omaha).....	10.00	15.00	50.0	66.7	35.0	39.6	37.9	29.6
New Hampshire (Manchester)...	10.00	10.00	50.0	50.0	(⁴)	(⁴)	(⁴)	22.7
New Jersey (Newark).....	10.00	12.00	50.0	66.7	33.0	31.3	31.2	24.2
New York (New York).....	15.00	20.00	66.7	66.7	51.4	49.6	39.0	40.4
Ohio (Cleveland).....	12.00	15.00	66.7	66.7	39.0	34.1	34.1	27.3
Oregon (Portland).....	{ ² 10.38 ³ 17.31 }	{ ² 13.49 ³ 22.50 }	(⁵)	(⁵)	{ ² 37.7 ³ 60.0 }	² 33.7 ³ 56.2	² 23.6 ³ 39.3	² 27.3 ³ 45.5
Pennsylvania (Pittsburgh).....	10.00	12.00	50.0	60.0	36.4	32.5	27.3	27.3
Rhode Island (Providence).....	10.00	14.00	50.0	50.0	36.4	33.0	34.4	31.8
Tennessee (Memphis).....	(¹)	11.00	(¹)	50.0	(¹)	(¹)	28.6	25.0
Texas (Dallas).....	15.00	15.00	60.0	60.0	50.5	50.5	45.5	34.1
Utah (Salt Lake City).....	(¹)	16.00	(¹)	60.0	(¹)	39.6	36.4	32.3
Virginia (Richmond).....	(¹)	12.00	(¹)	50.0	(¹)	(¹)	24.6	27.3
Washington (Seattle).....	{ ² 6.92 ³ 12.12 }	{ ² 6.92 ³ 12.12 }	(⁵)	(⁵)	{ ² 25.2 ³ 44.1 }	² 21.0 ³ 36.7	² 15.7 ³ 27.5	² 14.0 ³ 24.5
Wisconsin (Milwaukee).....	9.75	14.63	65.0	65.0	35.5	35.5	41.6	33.3

¹ No law.

⁴ No scale given.

² With no dependents.

⁵ A flat monthly pension not based on wages.

³ Maximum with dependents.

In this table the occupation of structural-iron worker only is considered. This selection was made upon the assumption that the work of a structural-iron worker was perhaps less seasonal than that of bricklayers, for instance, and that his actual full-time wage would more nearly represent his average earnings. It will be noted from this table that though Colorado increased her weekly maximum to \$10 in 1920 as against \$8 in 1916, yet the Denver structural-iron worker injured in 1916 would have received 29.1 per cent of his earnings in compensation, whereas in 1920 he would receive but 22.7 per cent. New York increased her weekly maximum from \$15 to \$20, and yet reduced the actual percentage received by the worker from 51.4 to 40.4. Even in cases where both the weekly maximum and the statutory percentage have been increased, as in Minnesota, the structural-iron worker injured in 1916 with a weekly maximum of \$11 and a statutory percentage of 50 would have received 40 per

cent of his earnings in compensation, whereas in 1920 with a statutory percentage increased to 66 $\frac{2}{3}$ and a weekly maximum increased to \$15, he would receive but 39 per cent of his earnings. The table will furnish a number of even more startling instances of percental reduction and total inadequacy of compensation.

TABLE 4.—COMPARISON OF STATUTORY AND ACTUAL PERCENTAGES OF WAGES RECEIVED AS COMPENSATION UNDER STATE COMPENSATION ACTS FOR SPECIFIED WEEKLY EARNINGS IN 1920.

State.	Per cent provided for in law.	Per cent actually received by man earning per week—			
		\$25	\$30	\$35	\$40
Alabama.....	{ ¹ 50.0 ² 60.0	¹ 48.0 ² 60.0	¹ 40.0 ² 50.0	¹ 34.3 ² 42.6	¹ 30.0 ² 37.5
Alaska.....	50.0	50.0	50.0	50.0	50.0
Arizona.....	50.0	50.0	50.0	50.0	50.0
California.....	65.0	65.0	65.0	59.5	52.1
Colorado.....	50.0	40.0	33.3	28.6	25.0
Connecticut.....	50.0	50.0	46.7	40.0	35.0
Delaware.....	50.0	50.0	50.0	42.6	37.5
Georgia.....	50.0	48.0	40.0	34.3	30.0
Hawaii.....	60.0	60.0	60.0	51.4	45.0
Idaho.....	55.0	48.0	40.0	34.3	30.0
Illinois.....	{ ¹ 50.0 ² 65.0	¹ 48.0 ² 60.0	¹ 40.0 ² 50.0	¹ 34.3 ² 42.6	¹ 30.0 ² 37.5
Indiana.....	55.0	52.8	44.0	37.7	33.0
Iowa.....	60.0	60.0	50.0	42.6	37.5
Kansas.....	60.0	60.0	50.0	42.6	37.5
Kentucky.....	65.0	60.0	50.0	42.9	37.5
Louisiana.....	60.0	60.0	60.0	51.4	45.0
Maine.....	60.0	60.0	50.0	42.6	37.5
Maryland.....	66.7	66.7	60.0	51.4	45.0
Massachusetts.....	66.7	64.0	53.3	45.7	40.0
Michigan.....	60.0	56.0	46.7	40.0	35.0
Minnesota.....	66.7	60.0	50.0	42.6	37.5
Missouri.....	66.7	60.0	50.0	42.6	37.5
Montana.....	50.0	50.0	41.7	35.7	31.3
Nebraska.....	66.7	60.0	50.0	42.6	37.5
Nevada.....	60.0	{ ¹ 60.0 ² 75.7	¹ 55.4 ² 63.1	¹ 47.5 ² 54.1	¹ 41.6 ² 47.3
New Hampshire.....	50.0	40.0	33.3	28.6	25.0
New Jersey.....	66.7	48.0	40.0	34.3	30.0
New Mexico.....	50.0	48.0	40.0	34.3	30.0
New York.....	66.7	66.7	66.7	57.1	50.0
North Dakota.....	66.7	66.7	66.7	57.1	50.0
Ohio.....	66.7	60.0	50.0	42.6	37.5
Oklahoma.....	50.0	50.0	50.0	50.0	45.0
Oregon.....	(³)	{ ¹ 54.0 ² 78.0	¹ 45.0 ² 75.0	¹ 38.6 ² 64.3	¹ 33.7 ² 56.3
Pennsylvania.....	60.0	48.0	40.0	34.3	30.0
Porto Rico.....	50.0	28.0	23.3	20.0	17.5
Rhode Island.....	50.0	50.0	46.7	40.0	35.0
South Dakota.....	55.0	48.0	40.0	34.3	30.0
Tennessee.....	50.0	44.0	36.7	31.4	27.5
Texas.....	60.0	60.0	50.0	42.6	37.5
Utah.....	60.0	60.0	53.3	45.7	40.0
Vermont.....	50.0	50.0	41.7	35.7	31.3
Virginia.....	50.0	48.0	40.0	34.3	30.0
Washington.....	(³)	{ ¹ 27.7 ² 48.5	¹ 23.1 ² 40.4	¹ 19.8 ² 34.6	¹ 17.3 ² 30.3
West Virginia.....	50.0	48.0	40.0	34.3	30.0
Wisconsin.....	65.0	58.5	48.8	41.8	36.6
Wyoming.....	(³)	{ ¹ 32.3 ² 55.4	¹ 26.9 ² 46.2	¹ 23.1 ² 39.6	¹ 20.2 ² 34.6
United States.....	66.7	61.5	51.3	43.9	38.5
British Columbia.....	55.0	55.0	55.0	55.0	55.0
Ontario.....	66.7	66.7	66.7	66.7	66.7

¹ With no dependents.

² Maximum with dependents.

³ A flat monthly pension not based on wages.

In Table 4 is shown the application of the present law to specified weekly earnings regardless of the industry in which they may be found—that is to say, both the percentage found in the law and the maximum weekly allowance under the law are considered in arriving at the per cent actually received by the man earning a weekly wage of \$25, \$30, \$35, and \$40.

It will be noted that in all States where a weekly maximum is provided in the statute the per cent of compensation received by the injured workman is less than the per cent provided for in the statute, and this percentage of course decreases with the increased earning power of the man.

Effect of Waiting Period upon Amounts Paid to Disabled Workers.

UNFORTUNATELY the weekly maximum is not the only check found in the compensation legislation of the country which operates to increase the share of the industrial accident costs which the workman must bear. The waiting period operates further very materially to reduce the percentage of his wages which the injured workman receives. The great disparity in the length of the waiting period in the various States makes it exceedingly difficult to show the relative proportion of industrial accident losses which the workers bear in the various States. Tables 1 to 4, herewith submitted, showing the ratio of actual compensation to wages, do not take into account this waiting period. From the American Accident Table it is ascertained that in 100,000 accident cases 95,306 cases suffered temporary total disability, while the total days so lost according to the distribution table was 1,676,506. In order to obtain the actual wage loss suffered by injured workers, the percentages heretofore shown should be further reduced by the factor representing the effect of the waiting period. From computations made in this bureau it is found that a 3-day waiting period is equal to 2.8 per cent of the average permanent total disability; a waiting period of 7 days is equal to 9.4 per cent; a waiting period of 10 days is equal to 14.4 per cent; while a waiting period of 14 days is equal to 20.7 per cent.

Table 5 shows the apparent statutory percentages of wages actually received as compensation revised to take into consideration the days of waiting period before compensation begins.

TABLE 5.—PER CENT OF WAGES ACTUALLY RECEIVED AS COMPENSATION FOR DISABILITY.

[In compiling this table the necessary deductions were made for the waiting period, i. e., days of disability for which employees did not receive compensation.]¹

State.	Days of waiting period (disability) before compensation begins.	Per cent of wage compensation lost on account of non-payment for waiting period.	Per cent of wages actually received as compensation by employees whose wages per week are—			
			\$25	\$30	\$35	\$40
Alabama.....	14	20.7	² 38.1	² 31.7	² 27.2	² 23.8
Alaska.....	14	20.7	² 47.6	² 39.7	² 33.8	² 29.7
Arizona.....	14	20.7	39.7	39.7	39.7	39.7
California.....	7	9.4	58.9	58.9	53.9	47.2
Colorado.....	10	14.4	34.2	28.5	24.5	21.4
Connecticut.....	7	9.4	45.3	42.3	36.2	31.7
Delaware.....	14	20.7	39.7	39.7	33.8	29.7
Georgia.....	14	20.7	38.1	31.7	27.2	23.8
Hawaii.....	7	9.4	54.4	54.4	46.6	40.8
Idaho.....	7	9.4	43.5	36.2	31.1	27.2
Illinois.....	7	9.4	² 43.5	² 36.2	² 31.1	² 27.2
Indiana.....	7	9.4	² 54.4	² 45.3	² 38.6	² 34.0
Iowa.....	14	20.7	47.8	39.9	34.2	29.9
Kansas.....	7	9.4	47.6	39.7	33.8	29.7
Kentucky.....	7	9.4	54.4	45.3	38.6	34.0
Louisiana.....	7	9.4	54.4	45.3	38.9	34.0
Maine.....	10	14.4	54.4	54.4	46.6	40.8
Maryland.....	3	2.8	51.4	42.8	36.5	32.1
Massachusetts.....	10	14.4	64.8	58.3	50.0	43.7
Michigan.....	7	9.4	54.8	45.6	39.1	34.2
Minnesota.....	7	9.4	50.7	42.3	36.2	31.7
Missouri.....	7	9.4	54.4	45.3	38.6	34.0
Montana.....	14	20.7	54.4	45.3	38.6	34.0
Nebraska.....	7	9.4	39.7	33.1	28.3	24.8
Nevada.....	7	9.4	54.4	45.3	38.6	34.0
New Hampshire.....	14	20.7	² 54.4	² 50.2	² 43.0	² 37.7
New Jersey.....	10	14.4	² 68.6	² 57.2	² 49.0	² 42.9
New Mexico.....	14	20.7	31.7	26.4	22.7	19.8
New York.....	14	20.7	41.1	34.2	29.4	25.7
			38.1	31.7	27.2	23.8
			52.9	52.9	45.3	39.7

¹An attempt to bring all the States upon a uniform basis by deducting the waiting period in each case raises further complication, because in a number of States the waiting period is abolished if the disability extends beyond a certain period. However, comparatively few injured workers would receive the benefit of this conditional abolition of the waiting period because a large majority of temporary disability accidents are of short duration. The following table shows the facts for each State in this regard:

State.	Waiting period.
Connecticut.....	1 week; none if disabled over 4 weeks.
Illinois.....	1 week; none if disabled 4 weeks.
Louisiana.....	1 week; none if disabled 6 weeks.
Michigan.....	Do.
Missouri.....	1 week; none if disabled over 6 weeks.
Nebraska.....	1 week; none if disabled 6 weeks.
Nevada.....	1 week; none if disabled 2 weeks.
North Dakota.....	1 week; none if disabled over 1 week.
Oklahoma.....	1 week; none if disabled 3 weeks.
Washington.....	1 week; none if disabled over 30 days.
Wisconsin.....	1 week; none if disabled over 4 weeks.
South Dakota.....	10 days; none if disabled 6 weeks.
Wyoming.....	10 days; none if disabled over 30 days.
Alabama.....	2 weeks; none if disabled 4 weeks.
Alaska.....	2 weeks; none if disabled 8 weeks.
Arizona.....	2 weeks; none if disabled over 2 weeks.
Delaware.....	2 weeks; none if disabled 4 weeks.
Georgia.....	2 weeks; none if disabled over 4 weeks.
New York.....	2 weeks; none if disabled over 7 weeks.
Rhode Island.....	2 weeks; none if disabled over 4 weeks.
Tennessee.....	2 weeks; none if disabled 6 weeks.

² With no dependents.

³ Maximum with dependents.

TABLE 5.—PER CENT OF WAGES ACTUALLY RECEIVED AS COMPENSATION FOR DISABILITY—Concluded.

[In compiling this table the necessary deductions were made for the waiting period, i. e., days of disability for which employees did not receive compensation.]

State.	Days of waiting period (disability) before compensation begins.	Per cent of wage compensation lost on account of non-payment for waiting period.	Per cent of wages actually received as compensation by employees whose wages per week are—			
			\$25	\$30	\$35	\$40
North Dakota.....	7	9.4	60.4	60.4	51.7	45.3
Ohio.....	7	9.4	54.4	45.3	38.6	34.0
Oklahoma.....	7	9.4	45.3	45.3	45.3	40.8
Oregon.....	None.	.....	² 54.1	² 45.0	² 38.6	² 33.7
Pennsylvania.....	10	14.4	² 78.0	² 75.0	² 64.3	² 56.3
Porto Rico.....	None.	.....	41.1	34.2	29.4	25.7
Rhode Island.....	14	20.7	28.0	23.3	20.0	17.5
South Dakota.....	10	14.4	39.7	37.0	31.7	27.8
Tennessee.....	14	20.7	41.1	34.2	29.4	25.7
Texas.....	7	9.4	34.9	29.1	24.9	21.8
Utah.....	3	2.8	54.4	45.3	38.6	34.0
Vermont.....	7	9.4	58.3	51.8	44.4	38.9
Virginia.....	10	14.4	45.3	37.8	32.3	28.4
Washington.....	7	9.4	41.1	34.2	29.4	25.7
West Virginia.....	7	9.4	² 25.1	² 20.9	² 17.9	² 15.7
Wisconsin.....	7	9.4	² 43.9	² 36.6	² 31.3	² 27.5
Wyoming.....	10	14.4	43.5	36.2	31.1	27.2
United States.....	3	2.8	53.0	44.2	37.9	33.2
			² 27.7	² 23.0	² 19.8	² 17.3
			² 47.4	² 39.5	² 33.9	² 29.6
			59.8	49.9	42.7	37.4

² With no dependents.

³ Maximum with dependents.

Thus Connecticut, which apparently in 1920 paid a man earning \$40 per week 35 per cent of his wages if injured, owing to her seven-day waiting period did in fact pay him but 31.7 per cent. In the case of Delaware, where a 14-day waiting period obtains, instead of an apparent 37.5 per cent we find an actual 29.7 per cent.

The theory of the waiting period in the old drafts of compensation laws was that some total loss of time was necessary from a psychological point of view to prevent malingering and subjective exaggeration of the results of industrial accidents. The crude thinking of that early day may now safely be erased from our statute books. If compensation were paid at the rate of 100 per cent total wage loss then the old arguments advanced for a waiting period of at least seven days might still carry weight, but with the worker bearing from 40 to 70 per cent of the wage loss under the best statutes, the addition of a dead weight like the waiting period is not going to decrease malingering, and it does greatly add to the hardships and burden of the great mass of injured workers.

The State of Oregon has no waiting period. There is no waiting period provided in the compensation law of Porto Rico. Has not the time already arrived when the percentage of compensation as expressed in the statute may be fairly and honestly applied without the double check of maximum weekly payments and absurdly prolonged waiting periods?

Separations from the Government Service.¹

By MARY CONYNGTON.

RECENT articles in the MONTHLY LABOR REVIEW have dealt with the stationary tendency of Government salaries and the lack of a well worked out personnel policy in the Government service.² These two factors have worked together to increase the number of resignations from the civil service, and these have in recent years become so numerous that the matter seems to deserve some detailed consideration.

Unfortunately, comprehensive data on the subject are difficult to obtain. Up to 1917 the Civil Service Commission published in its annual reports the number of separations in the fiscal year covered, but owing to the pressure of work caused by war conditions it was found necessary to omit this feature. The following table shows the commission's data on the subject up to June 30, 1917:

RELATION OF SEPARATIONS FOR EACH SPECIFIED CAUSE TO TOTAL NUMBER OF EMPLOYEES, BY YEARS.

[Source: Civil Service Reports, 1903 to 1917.]

Fiscal year ending June 30—	Number of em- ployees.	Removed.		Resigned.		Died.		Total separations.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1903.....	135,678	1,571	1.2	4,999	3.7	842	0.6	7,412	5.5
1904.....	153,093	1,659	1.1	6,113	3.9	862	.6	8,634	5.6
1905.....	171,807	2,514	1.5	9,750	5.7	1,079	.6	13,343	7.7
1906.....	184,178	3,698	2.0	13,934	7.6	1,083	.6	18,715	10.2
1907.....	196,918	3,508	1.8	15,289	7.8	1,254	.6	20,051	10.2
1908.....	206,643	2,888	1.4	10,829	5.2	1,255	.6	14,972	7.2
1909.....	234,940	2,875	1.2	11,153	4.7	1,453	.6	15,481	6.6
1910.....	222,278	3,108	1.4	14,308	6.4	1,555	.7	18,971	8.5
1911.....	228,584	3,280	1.4	14,179	6.2	1,577	.7	19,036	8.3
1912.....	217,392	3,422	1.6	13,376	6.2	1,497	.7	18,295	8.4
1913.....	282,597	3,062	1.1	30,599	10.8	1,778	.6	35,439	12.5
1914.....	292,460	6,673	2.3	26,229	9.0	1,917	.7	34,819	11.9
1915.....	292,296	10,718	3.6	24,194	8.3	1,859	.6	36,771	12.6
1916.....	296,926	4,189	1.4	27,197	9.2	2,024	.7	33,410	11.3
1917.....	326,899	4,114	1.3	57,047	17.5	2,147	.7	63,308	19.4

The item of special interest here is the increase in the number of voluntary separations. It will be noticed that during the 15 years covered, the percentage of removals and of separations due to death each increased by one-tenth of 1 per cent, but the percentage of resignations at the end of the period is very nearly five times as great as at the beginning. Some part of the resignations in the year ending June 30, 1917, must be attributed to withdrawals of men who enlisted, but as our country did not enter the war until April this cause was operative for barely a quarter of the fiscal year, and can not account for the whole increase. Ignoring 1917, however, on account of this disturbing factor, the table shows that separations from the service were proportionately more than twice as numerous in 1916 as in 1903, while resignations had increased from something less than 1 in every 25 employees to not far from 1 in every 10.

¹ The data on which this article is based were collected and the tables prepared under the direction of Dr. C. D. Jarvis, of the Bureau of Education, for the Joint Congressional Committee on Reclassification.

² See MONTHLY LABOR REVIEW, June, 1920, pp. 19-35; July, 1920, pp. 11-25.

In an effort to bring this information more up to date the Commission on Reclassification sent out a questionnaire to the Government departments, asking data as to separations from the force for each fiscal year, beginning with 1915-16. In order that the data received might be worked out on a uniform basis, officials were asked to calculate their average number of employees by first deducting all temporary or special-job employees, and then dividing the sum of the numbers on the monthly pay rolls by 12. In giving the number of separations they were asked to exclude the field force, the temporary employees, and those who had been dropped on account of a reduction of force. The data received, therefore, relate to the permanent force of the Government, not including the fringe of temporary employees, special-job employees, and war workers, among whom separations would naturally be the most numerous. The information received in response to this questionnaire is shown in the following table:

AVERAGE NUMBER OF EMPLOYEES AND NUMBER AND PER CENT OF SEPARATIONS IN EACH OF THE YEARS 1915-16 TO 1918-19, BY DEPARTMENT OR ESTABLISHMENT.

Department or establishment.	1915-16			1916-17			1917-18			1918-19		
	Average number of employees. ¹	Separations.		Average number of employees. ¹	Separations.		Average number of employees. ¹	Separations.		Average number of employees. ¹	Separations.	
		Number. ²	Per cent of force.		Number. ²	Per cent of force.		Number. ²	Per cent of force.		Number. ²	Per cent of force.
Treasury.....	6,908	380	5.5	7,152	897	12.5	12,265	4,141	33.8	24,905	11,116	44.6
War.....	1,321	82	6.2	1,431	205	14.3	2,702	1,145	42.4	5,530	2,928	52.9
Justice.....	261	15	5.7	264	28	10.6	282	54	19.0	292	51	17.5
Post Office.....	1,585	135	8.5	1,613	234	14.5	1,509	390	25.8	1,736	431	24.8
Navy.....	771	86	11.2	998	172	17.2	1,689	458	27.1	2,396	903	37.7
Interior.....	5,285	1,080	20.4	5,163	1,570	30.4	5,360	2,489	46.4	5,720	2,152	37.6
Agriculture.....	3,486	284	8.1	4,101	563	13.7	4,720	1,137	24.1	5,051	1,363	27.0
Commerce.....	1,666	182	10.9	1,767	338	19.1	1,913	712	37.2	2,198	893	40.6
Labor.....	599	48	8.0	604	83	13.7	659	175	26.6	754	136	18.0
State.....	407	43	10.6	518	53	10.2	706	161	22.8	995	380	38.2
Library of Congress.....	412	61	14.8	416	93	22.4	401	177	44.1	410	167	40.7
Government Printing Office.....	3,839	244	6.4	3,880	337	8.7	4,451	2,434	54.7	4,885	2,296	47.0
Smithsonian.....	511	39	7.7	490	54	11.0	507	91	17.9	445	66	14.8
Interstate Commerce Commission.....	710	61	8.6	715	152	21.3	682	300	44.0	707	243	34.4
Federal Trade Commission.....	178	29	16.3	205	42	20.5	558	324	58.1	673	472	70.1
Tariff Commission.....							65	14	21.5	66	19	28.8
Civil Service Commission.....	216	45	20.8	216	47	21.8	332	149	44.9	441	233	52.8
Employees' Compensation Commission.....				23	38	165.2	43	22	51.2	57	32	56.1
Federal Board for Vocational Education.....							471	14	29.7	958	122	12.7
Shipping Board (Law Department).....							9	4	44.4	16	12	75.0
District of Columbia.....	2,905	300	10.5	3,011	439	14.6	3,105	1,067	34.4	3,331	920	27.6
Board of Indian Commissioners.....	3	1	33.3	3	1	33.3	4	2	50.0	4	3	75.0
Total.....	31,063	3,121	10.0	32,570	5,346	16.4	42,433	15,460	36.4	61,570	24,938	40.5

¹ Exclusive of temporary employees. Includes only those divisions from which returns were received.

² Exclusive of temporary employees and employees leaving the service on account of a reduction in force.

The data thus secured are not as comprehensive as those of the Civil Service Commission, but since they deal with groups of from 30,000 to 60,000, they are probably fairly indicative. Some evidence that this is so is found in the correspondence between these figures and those of the Civil Service Commission for the years 1915-16 and 1916-17. For these years the percentage of separations as collected

by the Reclassification Commission tallies very closely with the percentage of resignations as given by the Civil Service Commission. Since deaths form an almost negligible fraction of the separations, and since "removals" would probably be largely those cases which, as being the expiration of temporary appointments or dismissals for the purpose of reducing the force, the Reclassification Commission omitted, the heading "Separations" in this table and the heading "Resignations" in the civil service reports probably have much the same meaning, and the correspondence between the two sets of figures is at least an indication that the data secured by the questionnaire are reliable, any variance from the facts being in the direction of understatement.

The table shows, then, a remarkable increase in voluntary separations from the Government service within the last five years. For the years 1917-18 and 1918-19, the transfer of a large but undetermined proportion of the male employees into the military or naval service undoubtedly accounts for a part of the increase, but it can not account for all, especially since, during the second of these years, this cause was operative for little more than four months. It is not likely, for instance, that all or even most of the 11,116 who went out from the Treasury Department in 1918-19 entered the Army before the armistice was signed; and there is every reason to suppose that apart from the military demand, there was a marked increase in separations from the Government service in that year.

The figures for the fiscal year 1919-20 were not secured, but reports covering the first half of the year showed that employees were leaving the service, or those parts of it from which reports were received, at a rate which if continued throughout the year would mean the departure of one in every three. What such a rate of resignations means both to the efficiency of the Government service and to the cost of administration can easily be imagined.

Separation Rates Among Various Classes of Employees.

A STUDY of the kind of workers who are leaving shows that the separations involve an even more serious loss than would be indicated by their mere number. A loss of efficiency occurs whenever a worker familiar with the duties of a certain position leaves and his place is taken by a newcomer who must gain that familiarity. Obviously this loss is the more serious as the duties of the position are the more complex, or involve cooperation with others, or include carrying out plans and making observations extended over a long period. It is relatively a simple matter to replace a messenger boy, but a different affair to fill the place of one of a body of educators or scientists who are working together on nation-wide plans. Yet among such men, the scientific and technical employees of the Government, the rate of separation is particularly large. This is shown in the following table, based on data received from six bureaus, all requiring a force of specially trained workers. In passing it may be remarked also that this table, brought down to the close of the latest fiscal year, shows only a small falling off in withdrawals in 1919-20 as compared with 1918-19, while in two of the bureaus there has been an actual increase in separations in the last year.

DISTRIBUTION OF TECHNICAL AND NONTECHNICAL SEPARATIONS FOR THE
FISCAL YEARS 1915-16 TO 1919-20, BY BUREAU OR SERVICE.

Bureau.	1915-16			1916-17			1917-18			1918-19			1919-20		
	Average number of employees.	Separations.		Average number of employees.	Separations.		Average number of employees.	Separations.		Average number of employees.	Separations.		Average number of employees.	Separations.	
		Number.	Per cent of force.		Number.	Per cent of force.		Number.	Per cent of force.		Number.	Per cent of force.		Number.	Per cent of force.
Geological Survey:															
Scientific.....	422	43	10.2	420	58	13.8	435	81	18.6	460	126	27.4	400	92	23.0
Clerical.....	191	49	25.7	190	42	22.2	248	70	28.2	210	42	20.0	246	56	22.8
Skilled labor.....	137	15	11.0	135	42	31.1	167	69	41.3	159	48	30.2	135	49	36.3
Unskilled labor.....	55	23	41.8	55	29	52.7	60	44	73.3	41	17	41.5	34	17	50.0
Total.....	805	130	16.1	800	171	21.4	910	264	29.0	870	233	26.8	815	214	26.3
Patent Office:															
Technical.....	377	23	6.1	377	36	9.6	387	92	23.8	387	82	21.2	428	91	21.3
Nontechnical ¹	560	51	9.2	575	88	15.3	591	179	30.3	565	95	16.8	549	127	23.1
Total.....	937	74	8.0	952	124	13.0	978	271	27.7	952	177	18.6	977	218	22.3
Bureau of Mines:															
Scientific or technical.....							25	10	40.0	29	10	34.5	33	12	36.4
Clerical.....							67	19	28.4	72	35	48.6	82	28	34.1
Skilled labor.....							12	10	83.3	30	22	73.3	36	19	52.8
Unskilled labor.....							12	2	16.7	7	7	100.0	11	2	18.2
Total.....							116	41	35.3	138	74	53.6	162	61	37.7
Forest Service:															
Administrative, scientific, technical, and professional.....	93	6	6.5	98	5	5.1	84	11	13.1	87	18	20.7	88	15	17.0
Clerical.....	125	7	5.6	126	10	8.0	113	26	23.0	111	16	14.4	106	22	20.8
Skilled labor.....	23	5	21.7	25	7	28.0	30	10	33.3	22	9	40.9	23	.....	.....
Unskilled labor.....	20	.....	.....	19	.....	.....	16	1	6.3	16	.....	.....	19	.....	.....
Total.....	261	18	6.9	268	22	8.2	243	48	19.8	236	43	18.2	236	37	15.7
Bureau of Markets:															
Scientific.....	107	4	3.7	220	13	5.9	217	46	21.2	323	103	31.9	133	74	55.6
Clerical.....	149	10	6.7	331	28	8.5	516	133	25.8	917	253	27.6	363	153	42.1
Skilled labor.....	49	1	2.0	117	10	8.5	161	12	7.5	32	9	28.1	44	12	27.3
Unskilled labor.....	42	10	23.8	87	13	14.9	124	44	35.5	149	50	33.6	77	26	33.8
Total.....	347	25	7.2	755	64	8.5	1,018	235	23.1	1,421	415	29.2	617	265	42.9
Bureau of Standards:															
Scientific.....	270	75	28.0	338	133	39.3	676	492	72.8	609	978	160.3	548	566	103.3
Clerical.....	50	13	26.0	61	25	41.0	159	91	57.2	159	181	113.8	144	136	94.4
Skilled and unskilled labor.....	95	26	27.4	118	46	39.0	282	174	61.7	312	346	110.9	205	195	95.1
Total.....	415	114	27.5	517	204	39.5	1,117	757	67.9	1,080	1,505	139.4	897	897	100.0
All bureaus:															
Scientific.....	1,269	151	11.9	1,453	245	16.9	1,824	732	40.1	1,895	1,317	69.5	1,630	850	52.1
Clerical ²	1,075	130	12.1	1,273	193	15.1	1,694	518	30.6	2,034	622	30.6	1,490	522	35.0
Skilled laborers ³	304	47	15.5	395	105	26.6	652	275	42.2	555	434	78.2	443	275	62.1
Unskilled laborers.....	117	33	28.2	161	42	26.1	212	91	42.3	213	74	34.7	141	45	31.9
Total.....	2,765	361	13.1	3,282	585	17.8	4,382	1,616	36.9	4,697	2,447	52.1	3,704	1,692	45.7

¹ Largely clerical.

² Nontechnical force of Patent Office, which is largely clerical, is included in clerical total.

³ Includes a number of unskilled laborers in the Bureau of Standards.

This shows both that the rate of separations is larger in these strictly scientific and technical divisions than in the general service, as shown on page 12, and also that it is particularly large among the scientific and technical employees. Taking the six bureaus as a whole, the rate of separations is generally largest among the labor force, but here, although the turnover is regrettable and detrimental to efficiency, it is less harmful than among the employees whose work is

more specialized, who require much longer preparation and training, and who are consequently harder to replace. It will be noticed that the separations have been increasing more rapidly among the scientific and technical than among the clerical employees. Up to the last fiscal year this appears in every one of the six divisions, but is perhaps most plainly traced in the combined force. Taking the six together, in the year 1915-16 the clerical and the scientific groups show practically the same percentage of separations. The next year the scientific group shows a slight excess, and by the end of 1918-19 the percentage of separations among the scientific and technical workers was more than twice as large as among the clerical employees. In 1919-20 the difference is not so marked, but the rate of separations is still nearly 50 per cent greater in the scientific group.

The position in the Bureau of Standards is especially noteworthy. In 1918-19, in every class of employees, the scientific and technical, the clerical, and the skilled and unskilled labor groups, the number leaving was greater than the average total staff employed. In 1919-20 matters improved slightly, but the rate of separations was still 100 per cent for the whole bureau and 103 per cent for the scientific workers. What such rates mean in breaking up the continuity of the work, in time spent in training new employees, and in interference with the smooth coordination of the various parts of the work any employer can judge. Figures collected in December, 1919, show that in one group of clerical workers in this bureau, numbering 116, only 12 had a record of five years or more of service, while 29 others had been with the group two years but under five; 65 per cent had been in the work less than two years, their period of service ranging from 23 months down to a few days.

Reasons for Leaving Government Service.

THESE rates of separation give force to several questions. Why are the Government employees leaving its service in such numbers? How are they being replaced? What is the cost of replacing them? And can the outward movement be slackened, or perhaps brought back to the figures prevailing 20 years ago?

Increase in Salary.

The question of why they are leaving presents few difficulties; to a large extent it is a matter of dollars and cents. In a former article it was shown that while the cost of living has risen sharply since 1893 the scale of Government salaries has either remained stationary or increased so slightly that relatively the Government employee is much worse off than he was 25 years ago. In the industrial world wages and salaries have risen much more noticeably than in the civil service, and the difficulty of making both ends meet is forcing trained and experienced workers out of the Government service and into private employment. This cause is especially operative in the case of scientific and technical workers, whose salaries within the Government have remained practically stationary, while outside there is at present an active demand for their services at rates which present a strong appeal to men who have seen their standard of living steadily falling as prices rise. Some data presented from the Forestry Service relating to resignations within one year show men who were receiving \$1,100 in the Government service going out to take positions at

\$1,500 to \$3,600; men at \$1,200 going out to salaries of \$1,800 and \$2,700; men at \$1,500 going out to positions at from \$1,800 to \$3,600; and one case of a man receiving \$1,800 who left to take \$10,000. Figures from the Patent Office, relating to a group of principal examiners who had left during two years, show that their average length of service in the Patent Office was 20 years 7 months, and that each at the time he left was receiving \$2,700. The average initial salary received outside was \$4,460, the range being from \$3,500 to \$6,000. Their average length of service outside at the time these figures were collected was 10 months, and the average salary then received was \$5,540, the range being from \$3,500 in the case of a man who had been out half a month to \$10,000 received by a man who had been out a year and a half. The Bureau of Plant Industry furnished figures concerning employees who had gone out during the year 1919, the increases of salary received ranging from 14 to 100 per cent. Two of the employees leaving the Bureau of Mines during the calendar year 1919 were receiving \$4,000 and went out to take, respectively, \$10,000 and \$12,000, while a third, who was receiving \$4,800, left to take a position at \$15,000. Such salaries as were received in these latter cases are, of course, unusual, but they show the range of opportunity outside the Government service.

The Bureau of Markets furnished figures concerning 71 employees who had left during the period from August 1, 1918, to September 1, 1919, to take higher salaries outside. The list is too long to give in full, but for the two groups who in the Government service were receiving, respectively, the highest and the lowest salaries the data are as follows:

SALARIES RECEIVED BY TWO GROUPS OF EMPLOYEES OF THE BUREAU OF MARKETS WHILE IN GOVERNMENT SERVICE AND IN OUTSIDE POSITIONS.

Position held in Bureau of Markets.	Salary in bureau.	Initial salary of new position.
Highest paid group:		
Chief of bureau.....	\$4,500	\$20,000
Specialist in cooperative organization.....	4,000	7,500+
Cotton technologist.....	4,000	10,000
Specialist in fruit grading and standardization.....	3,750	10,000
Pomologist in charge of fruit transportation.....	3,500	5,000
Specialist in city marketing.....	3,000	5,000
Specialist in cotton classing.....	3,000	10,000
Grain supervisor.....	3,000	3,600
Supervising inspector.....	3,000	5,000
Do.....	3,000	4,500+
Average salary received in bureau.....	\$3,475	
Average salary accepted outside.....	8,060	
Average increase.....	4,585	
Lowest paid group:		
Grain sampler.....	1,560	2,000
Do.....	1,500	1,980
Do.....	1,500	2,500
Scientific assistant in marketing and distribution.....	1,500	2,500
Junior assistant in marketing dairy products.....	1,500	2,300
Field agent in organization.....	1,500	3,300
Food products inspector.....	1,500	2,200
Assistant in marketing fruits and vegetables.....	1,400	1,800
Assistant in market surveys.....	1,400	1,800
Assistant in marketing reporting.....	1,400	1,500
Junior assistant in marketing dairy products.....	1,380	1,800
Grain sampler.....	1,320	1,800+
Market station assistant.....	1,200	1,560
Aid in grain standardization.....	1,200	1,800
Do.....	1,200	2,244
Cotton classer's helper.....	1,200	1,344
Do.....	840	1,800
Average salary received in bureau.....	\$1,359	
Average salary accepted outside.....	2,011	
Average increase.....	652	

[1136]

The salaries received by the first group after quitting the Government are thrown out of proportion by the one \$20,000 position. Omitting that case as being nontypical, the average salary for the other nine was \$3,361 in the Government, and \$6,733 on leaving it, an average increase of \$3,372. The group of low paid employees presents no such extreme contrast as is involved in the passage from a salary of \$4,500 to one of \$20,000, but it shows two cases in which increases of more than 100 per cent were secured, one field agent going from a salary of \$1,500 to one of \$3,300, and a cotton classifier's helper leaving a salary of \$840 to take one of \$1,800.

In order to secure a fair idea of what those resigning from the Government received, data were collected from as many sources as possible. Obviously, it is impossible to make such an inquiry cover all resignations; the outgoing employee may not care to give information as to his salary, or may have passed out of reach before inquiry is made. But the figures desired were secured from a group of over a thousand scientific, technical and professional employees, and are here presented:³

SALARY ADVANCES OF SCIENTIFIC, TECHNICAL, AND PROFESSIONAL EMPLOYEES
UPON LEAVING THE GOVERNMENT SERVICE.

Department and bureau.	Number of employees.	Average salary before leaving.	Average salary after leaving.	Average advance over Government salary.	Average per cent of increase over Government salary.
Treasury:					
Supervising Architect's Office	27	\$1,603	\$2,386	\$783	48.8
War:					
Ordnance Department	70	1,446	1,927	481	33.3
Naval:					
Bureau of Construction and Repair	13	2,860	4,311	1,451	50.7
Naval Observatory	18	1,164	1,567	403	34.6
Bureau of Yards and Docks	28	2,176	2,734	558	25.6
Bureau of Steam Engineering	6	2,099	2,636	537	25.6
Interior:					
Bureau of Education	11	2,864	4,640	1,776	62.0
Geological Survey	47	2,007	4,157	2,150	107.1
Office of Indian Affairs	8	1,525	3,313	1,788	117.2
General Land Office	8	1,503	2,258	755	50.2
Bureau of Mines	66	2,234	4,548	2,314	103.6
Patent Office	152	1,828	2,439	611	33.4
Agriculture:					
Bureau of Animal Industry	26	2,008	2,780	772	38.4
Bureau of Biological Survey	3	1,662	2,200	538	32.4
Bureau of Chemistry	98	2,062	3,275	1,213	58.8
Bureau of Entomology	36	1,551	2,021	470	30.3
Office of Farm Management	13	1,865	2,292	427	22.9
Federal Horticultural Board	4	1,950	2,279	329	16.9
Forest Service	99	1,769	2,737	968	54.7
Bureau of Markets	71	2,066	3,498	1,432	69.3
Bureau of Plant Industry	98	1,735	2,621	886	51.1
Division of Publications, Section of Illustrations	2	1,400	2,440	1,040	74.3
Bureau of Public Roads	16	2,521	4,012	1,491	59.1
Bureau of Soils	14	2,217	3,876	1,659	74.8
States Relations Service	10	2,597	3,301	704	27.1
Commerce:					
Coast and Geodetic Survey	55	1,090	1,399	309	28.3
Bureau of Lighthouses	5	1,680	3,124	1,444	85.9
Bureau of Standards	41	1,854	2,497	643	34.7
Labor:					
Bureau of Naturalization	3	1,267	2,283	1,016	80.2
Smithsonian Institution	2	2,400	4,900	2,500	104.2
Interstate Commerce Commission:					
Bureau of Carriers' Accounts	83	2,576	3,523	947	36.7
Bureau of Inquiry	8	3,863	8,175	4,312	111.6
Bureau of Statistics	16	1,658	2,444	786	47.4
Federal Board for Vocational Education	7	4,429	4,979	550	12.4
International Boundary Commission, United States and Canada	9	2,682	5,344	2,662	99.3
General average	1,173	1,806	2,761	955	53.0

³ These figures were gathered by officials of the various bureaus and divisions represented, and were collected to a considerable extent by correspondence. No effort was made to verify the statements of the ex-employees as to the salaries they received on leaving the Government.

The average increase of salary received on leaving, as shown here, ranges from \$309 for the 55 employees of the Coast and Geodetic Survey to \$4,312 for the 8 employees leaving the Bureau of Inquiry of the Interstate Commerce Commission. In 5 cases the average increase is \$2,000 or more, in 10 cases it is under \$2,000 but over \$1,000, and in only 6 cases does it fall below \$500. The average increase for the whole group of 1,173 employees is almost a thousand dollars—\$955. In only 3 of the 35 divisions from which reports are given is the average increase less than 25 per cent of the salary received in the Government, while in 18 it ranges from 50 to over 100 per cent. For the group as a whole the percentage of increase is 53.

It is not suggested that the Government can or should aim at establishing salaries equal to the higher ranges of those paid outside. A government securing its revenues through taxation can not expect to compete with the great industrial enterprises whose annual profits run into the millions. Private industry can usually secure the exceptional man by offering an exceptional salary. But unless the general level of Government salaries approximates that of the salaries outside, not only the exceptional man, but the average man as well, will prefer private employment. If the Government seeks efficiency, it can not afford to ignore the value set upon services of a specified grade, as evidenced by the salaries generally paid for them, nor can it afford to assume that because 30 years ago a given salary would attract an abundance of workers of at least average ability it will continue to attract and hold them when both the cost of living and the salary level outside have risen conspicuously. The striking increase in the number of voluntary separations from the Government service testifies to the unfortunate results of such a policy.

It was difficult to obtain similar information for other classes of ex-employees. Data were secured, however, concerning 296 clerical employees who left the Department of Agriculture during the period represented approximately by the fiscal year 1918-19. The results are given in the following table. It will be noticed that while the increases received on leaving the Government service were not so large as in the case of the scientific and technical workers, they nevertheless represent a substantial advance, averaging an increase of 46 per cent over the Government salaries.

SALARY ADVANCES OF CLERICAL EMPLOYEES OF THE DEPARTMENT OF AGRICULTURE WHO LEFT THE SERVICE DURING THE PERIOD REPRESENTED APPROXIMATELY BY THE FISCAL YEAR ENDING JUNE 30, 1919.

Bureau.	Number of employees.	Average salary at time of leaving.	Average salary after leaving.	Average advance over Government salary.	Average per cent of increase over Government salary.
Office of Secretary.....	13	\$1,003	\$2,146	\$1,143	114.0
Library.....	1	660	1,000	340	51.5
Division of Accounts.....	3	1,467	2,067	600	40.9
Bureau of Crop Estimates.....	6	983	1,450	467	47.5
Federal Horticultural Board.....	2	1,280	5,620	4,340	339.1
Weather Bureau.....	20	795	1,602	807	101.5
Forest Service.....	48	980	1,375	395	40.3
Bureau of Chemistry.....	11	1,118	1,491	373	33.4
Bureau of Entomology.....	1	1,800	1,800	.....	.....
Bureau of Biological Survey.....	3	1,027	1,633	606	59.0
Division of Publications.....	5	908	1,215	307	33.9
States Relations Service.....	13	1,162	1,463	301	25.9
Bureau of Public Roads.....	1	1,380	1,800	420	30.4
Bureau of Markets.....	107	1,026	1,354	328	31.9
Bureau of Plant Industry.....	52	869	1,251	382	44.0
Bureau of Animal Industry.....	10	944	1,319	375	39.7
Total.....	296	987	1,440	453	45.9

[1138]

Better Chances for Advancement in Private Employment.

A second reason for the numerous resignations is found in the fact that apart from the immediate increase of salary, employment outside appears to offer better chances for advancement than are found in the Government service. The Government pays no salaries of \$15,000, \$20,000, or more, and while such salaries are not common outside, they exist, and every ambitious worker feels that he may be one of the prize winners. Even for the men who have no thought of reaching such salary levels, promotions seem to be more rapid outside than within the Government. For 609 scientific, technical, and professional employees who had resigned, data were secured showing the rate at which their salaries had been increased while within the Government service and after leaving it. These data are given in the following table:

RATE OF SALARY ADVANCEMENT OF SCIENTIFIC, TECHNICAL, AND PROFESSIONAL EMPLOYEES BEFORE AND AFTER LEAVING THE GOVERNMENT SERVICE, BY BUREAUS.

Bureau.	Number of employees.	In the Government service.				After leaving Government service.			
		Average initial salary.	Average salary at time of leaving.	Average length of service.	Average increase per year.	Average initial salary.	Average present salary.	Average length of service.	Average increase per year.
				Yrs. Ms.				Yrs. Ms.	
Supervising Architect's Office.....	11	\$1,102	\$1,573	7 0	\$67	\$2,245	\$3,822	4 9	\$332
Naval Observatory.....	14	918	1,193	3 7	77	1,650	3,629	5 2	383
Bureau of Education.....	11	2,455	2,864	4 6	91	4,640	5,231	3 1	192
Geological Survey.....	47	1,038	2,006	7 6	129	4,157	6,238	1 9	1,189
General Land Office, Division of Public Surveys.....	4	1,540	1,455	4 0	1 21	2,000	3,300	11 0	118
Bureau of Mines.....	11	3,075	3,366	2 7	112	6,718	10,550	1 6	2,555
Patent Office.....	136	1,363	1,838	6 1	78	2,450	4,964	5 8	444
Bureau of Animal Industry.....	26	1,555	2,007	4 9	95	2,780	3,002	0 8	333
Bureau of Biological Survey.....	3	1,067	1,662	4 4	137	2,200	2,400	1 2	171
Bureau of Chemistry.....	48	1,444	2,064	5 0	124	3,016	3,980	1 10	524
Bureau of Entomology.....	36	1,212	1,551	2 6	136	2,021	2,185	1 0	164
Office of Farm Management.....	12	1,515	1,850	3 6	96	2,383	2,545	1 9	93
Federal Horticultural Board.....	4	1,950	1,950	1 2	.....	2,279	2,369	0 7	154
Forest Service.....	30	1,044	1,775	5 3	139	2,301	4,062	5 2	341
Bureau of Plant Industry.....	41	1,441	1,883	4 0	111	2,855	4,116	3 8	344
Bureau of Public Roads.....	3	1,640	2,513	5 11	148	3,353	5,500	1 8	1,300
States Relations Service.....	10	2,122	2,597	4 2	114	3,301	3,715	1 0	414
Coast and Geodetic Survey.....	36	984	1,156	2 11	59	1,426	2,696	8 10	144
Bureau of Standards.....	38	1,253	1,887	3 7	177	2,540	2,813	0 8	410
Bureau of Naturalization.....	3	833	1,266	4 2	104	2,283	3,266	3 8	268
Bureau of Carriers' Accounts, Interstate Commerce Commission..	64	1,943	2,530	4 9	124	3,298	6,190	4 8	618
Bureau of Inquiry, Interstate Commerce Commission.....	6	1,470	3,950	8 0	310	7,400	7,900	1 4	375
Federal Board for Vocational Education.....	7	4,214	4,429	1 3	172	4,979	5,050	0 5	170
International Boundary Commission United States and Canada...	6	1,834	2,473	5 5	118	5,267	4,950	1 5	1 224
Division of Publications, Section of Illustrations, Department of Agriculture.....	2	1,020	1,400	5 8	67	2,440	2,798	2 11	123
Total.....	609	1,456	1,987	4 10	110	2,880	4,458	3 8	430

¹ Decrease.

The data here given do not make a satisfactory comparison, owing to the difference in the length-of-service periods, and the small size of some of the groups, which gives disproportionate weight to the experience of a single worker. Nevertheless, it is fairly apparent that the rate of increase within the Government service is slow, while outside, in some instances at least, it is rapid. Also, there is a much greater range of possibility outside; the goal is higher, and the chance of rising occurs more frequently, so that even if a position of similar duties offered exactly the same salary within and without the service, there would still be considerable inducement to take the outside place.

Cost of Replacement of Government Employees.

IT IS difficult to form any estimate of what it costs the Government to replace those who are resigning in such numbers. Two obvious factors of expense are the overhead costs, including the recruiting of new employees, and, especially among craftsmen, the more rapid depreciation of machinery and equipment due to ignorance or lack of skill on the part of the new workers; and the operating costs, made up of a number of items. For instance, they must include the time during which the new employee is receiving his training and during which, consequently, his output is below normal; the time of whoever gives the training; time lost in repeating work improperly done; time lost on unfinished investigations which can not be continued by new employees; waste of materials due to lack of knowledge or lack of skill, and time lost by other workers in subsequent operations on account of faulty work done by inexperienced and untrained employees. Apart from all these, there is an intangible but serious loss due to the impairment of morale which accompanies a large labor turnover. Plainly it is impossible to calculate with any precision the loss accruing from all these causes, but some estimates of the cost of specific factors have been made.

During the fiscal year ending June 30, 1919, according to an estimate made by the Civil Service Commission, the cost of recruiting and certifying new employees amounted to \$1,144,014. This merely brought the candidate to the stage of appointment, allowing nothing for his training in the new position. Several administrative officials filed with the Commission on Reclassification estimates of the cost of training new workers of specified grades. The superintendent of the Coast and Geodetic Survey estimated, on the basis of data carefully worked out, that the cost of each replacement of scientific and technical employees was over a thousand dollars. The cost would not be so high, he explained, were it not that owing to the relatively low salaries paid, he can not obtain men having even a moderate amount of experience, so that all the practical training has to be done at the Government's expense. In the General Land Office a careful record is kept of the production of the stenographic force, and on the basis of this it is estimated that on each change of these employees there is a loss to the Government of from \$200 to \$248. In the Public Library of the District the officials estimate that, not taking into account reduced efficiency, it cost \$24,150 during the four years beginning with 1915 to replace 183 employees. From the Library of Congress comes the statement that "the cost of turnover may be estimated on an

average as equal to the loss of a year's services—in the case of replacement of exceptionally expert and experienced cataloguers, it is incalculable." Naturally the cost of replacement would be much less in the case of unskilled workers or of those doing routine work, but even in these cases a loss is involved.

Difficulty of Replacement.

Worse, perhaps, than the financial cost is the delay and difficulty of replacement, and the fact that it is sometimes impossible. There are two classes of positions for which it is difficult and sometimes impossible to secure workers—the low-paid messenger and clerical positions, and the scientific and technical positions. In January, 1920, the Civil Service Commission was questioned as to the kind of positions it found difficulty in filling, and in reply, after giving a list of positions, the representative of the commission adds:

Among the positions difficult to fill are all clerical positions at \$720 and \$840, stenographer and typewriter up to and including \$1,200, junior chemists from \$1,040 to \$1,440, all positions in the Indian Service, and the position of fireman in the departmental service.

Practically all difficulties in filling vacancies arise on account of salary, many qualified persons being deterred from entering examinations by the low salaries specified in examination announcements.

In the case of positions requiring high qualifications, it is sometimes impossible to replace the outgoing worker. In February, 1920, an official of the Coast and Geodetic Survey made the following statement concerning conditions in the engineering staff:

Every position in the lowest grade, in which there are 19, is vacant. In the second grade, in which there are 10 positions, 5 are vacant. In the upper grades there are 11 vacancies, making a total of 35 for the whole Washington staff. The Civil Service Commission have not been able to certify a single engineer since last August.

From the same division comes an account of the efforts made to secure cartographers. A training school within the bureau was started and \$50 a month offered to apprentice draftsmen, but this proved ineffective. High schools and colleges were circularized for candidates, but to no effect. Possible applicants were sought wherever heard of.

July 10, 1919, 20 draftsmen, who had demonstrated their qualifications by Army service, were reported as having landed at Newport News. They were immediately called up by long-distance phone and the four vacant places tendered to any takers at \$1,400. The entire 20 declined. * * *

September 20 a circular was sent to 14 discharged soldiers, who had served as draftsmen in the base-map printing plant of the American Expeditionary Forces in France, advising them of the hope of securing six new positions at salaries up to \$2,240, including bonus. Only one seemed interested, and the failure of Congress through disagreement in conference to make these places available for new appointees left the bureau helpless, with 34 per cent of its cartographers' positions vacant.

The Department of Commerce reported 158 statutory positions vacant June 30, 1919, on account of the impossibility of securing candidates. The Department of the Interior reported 93 positions vacant from the same cause on January 27, 1920, and the Department of Agriculture reported 404 vacancies on November 30, 1919.

The number of vacancies tells only a part of the story, for sometimes as an emergency measure vacancies were filled in makeshift fashion by the temporary appointment of employees who did not come up to the requirements either of the Civil Service Commission

or of the department concerned. For instance, from the Patent Office, under date of November 28, 1919, comes the statement:

Replying to your request of this afternoon I beg to report that there are at this time 55 temporary fourth assistant examiners employed in the Patent Office. No one of these 55 at the time of his appointment had passed the civil-service examination for the position he fills. A very few, less than a dozen of them, have since taken the examination and passed. These temporary employees have been obtained from various sources and taken into the service with the permission of the Civil Service Commission, in view of its inability to furnish eligibles from its lists qualified to fill vacancies in the examining corps as they appear.

General Effect on the Service.

IT SEEMS hardly necessary to comment on what such a situation means to the work of the Government. One bureau reports that it is "facing absolute disintegration" as a result of the numerous resignations and the impossibility of filling its vacant places. Other bureaus feel that their work, no matter what the need for it, must be cut down, as their diminished staffs are simply unable to meet the demands. Others make shift to get along somehow in crippled fashion, but they do not and can not achieve satisfactory results. With regard to some of the divisions which are in direct contact with business interests this state of affairs has already evoked strong protest. In 1919 the Merchants' Association of New York instructed its committee on customs service and revenue law to investigate the unsatisfactory character of the customs service, and in January, 1920, the committee presented a report scoring the existing conditions:

Your committee has found that the customs service in all its branches is rapidly tending toward demoralization to such an extent that the business interests of the United States, extending to the smallest community, are to-day facing to an alarming degree a condition which, in the opinion of your committee, is jeopardizing practically every commercial enterprise.

The remedy for this state of things, the committee thought, lay in "a very substantial increase in the compensation paid to customs officials of all grades and an entire readjustment of the scale of compensation now in force."⁴ On somewhat similar grounds a delegation representing a number of business organizations protested to Congress in February, 1920, against the conditions prevailing in the Patent Office, and called for a substantial increase in salaries in order to put a stop to a deterioration of the patent force which was seriously affecting the business interests of the country.⁵ In other divisions which are not so directly and evidently in touch with the commercial interests of the country the results of the present situation are none the less pronounced; they are only a little slower in becoming apparent.

There is still another unfortunate aspect of the situation. The Government service, as a career for the specialist, is losing its standing, and the men who should be attracted to it, the beginners who should be serving their initiation and preparing to devote the serious work of their lives to its scientific or professional service, are almost unanimously turning their backs upon it, or in some cases enter-

⁴ Greater New York, Jan. 12, 1920, pp. 9-12.

⁵ Hearing before Committee on Rules of the House of Representatives, Feb. 24, 1920.

ing it with the intention of staying just long enough to receive a training which will make them especially valuable in private employment. The Commission on Reclassification received from officials in the Government employ several evidences of this attitude. Within a year past the Geological Survey sent to 21 universities and colleges a letter, accompanied by a civil service announcement of an examination for junior engineers in the Water Resources Branch at an entrance salary of \$1,200, suggesting that if seniors were interested they should file applications for examination as early as possible. A number of answers were received indicating that the young men felt they could do better elsewhere, of which the following may be taken as typical:

CIVIL ENGINEERING DEPARTMENT,
AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

I shall call the attention of my senior engineering class to the matter, as requested by you, but in view of the number of more attractive openings which are abundant at this time, I do not anticipate that many of the young men will elect to seek positions in this line of engineering work. By attractive openings I do not mean salaries alone, but opportunities for rapid advancement along lines which the young men prefer. Personally I know and appreciate the opportunities in the Water Resources Branch of the United States Geological Survey, but you know also that the opportunities for rapid promotion are less than in a number of industrial lines at the present time.

A committee of technical employees of the Government recently sent to 40 of the leading colleges and universities of the country letters of inquiry asking, among other things, the attitude of faculty and students toward Government service under present conditions. Almost without exception, the replies indicated that the graduates were not looking toward entering the Government service, but in fact had rather a strong preference for private employment. Two reasons were assigned: The better entrance salaries in private positions, and the greater chance of advancement. Since it is to the college graduates that the Government must look for the recruiting of its scientific and professional workers, the unanimity of opinion manifested is not of hopeful augury.

Conclusion.

SUMMING up the situation, then, it appears that conditions within the Government service are far from satisfactory. The number of separations has increased almost without interruption for 15 years past, the rate of increase being much accelerated during the war period, and the separations now amounting to about one-third of the whole force annually. Accompanying this there is an increasing difficulty in filling positions, which is especially marked in the low-paid routine positions, and in the scientific, technical, and professional positions. There is an actual lack, in some divisions, of the employees necessary to the service, so that the work is cut down, falls behind, or deteriorates in quality, to the serious detriment of the public welfare. On the part of the young men who should now be in training for the more important positions there is a growing disinclination to enter the Government service; and there is an increasing necessity for taking on substandard men, who lack either the training or the natural qualifications which the work requires, but who are the only ones obtainable under present circumstances. This fact militates against the good

repute of Government workers, and tends in its turn to keep the better men out;⁶ so that the situation appears to be going from bad to worse, and it does not yet appear what the end will be.

And yet there is no reason to suppose that it would be a task of insuperable difficulty to reverse this tendency, and to make the service once more attractive to the right kind of worker. The report of the Reclassification Commission has indicated the first steps toward this goal. A revision of the salary scale would be necessary, of course; skilled and capable workers simply will not remain indefinitely on salaries which mean a permanent lowering of their standard of living and which make it impossible for them to give their children at least as good a start in life as they had. But such a readjustment is long overdue, and should be made as a matter of justice, quite apart from its necessity as a means of retaining the workers. Equally important is the adoption of a personnel policy which would give the employee some assurance that good work would be recognized and rewarded, that work of a given quality would be paid at a given rate, no matter in what department it might be done, that promotion would depend on the worker's ability and application, not on the accident of the position he happened to fill or on the disposition of his immediate superior—which would, in short, make him feel himself a part of a coherent and smoothly functioning organization, in which his advancement would depend upon himself, and in which his salary would bear a reasonable relation both to the cost of living and to the value placed upon similar services outside the Government.

⁶ The reply received from Yale University in answer to the inquiry mentioned on p. 23 illustrates this: "I can emphatically state that the best students at Yale are not attracted by Government work, and that is due chiefly to two causes: first, lack of adequate salary; and second, the lack of a promising future. * * * Furthermore, there is a feeling that many of the civil-service appointees at present salaries are not the highest class men in their respective professions. The graduate who has sufficient means not to worry about inadequate salaries therefore has a tendency to avoid civil service, because he feels that it stamps him as a man of only mediocre ability. I have heard men say, 'If I take a civil-service job, people would think I wasn't good for anything better.'"

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices.¹

Table 1 shows for the United States retail prices of food on September 15 and October 15, 1920, and on October 15, 1919, as well as the percentage changes in the month and in the year. For example, the price of sugar on October 15, 1919, was 11.4 cents; on September 15, 1920, 18.3 cents; and on October 15, 1920, 13.9 cents. These figures show an increase of 22 per cent in the year but a decrease of 24 per cent in the month.

The cost of 22 food articles,² combined, showed an increase of 5 per cent in October, 1920, as compared with October, 1919, but a decrease of 3 per cent in October, 1920, as compared with September, 1920.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE OCT. 15, 1920, COMPARED WITH SEPT. 15, 1920, AND OCT. 15, 1919.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (—) Oct. 15, 1920, compared with—	
		Oct. 15, 1919.	Sept. 15, 1920.	Oct. 15, 1920.	Oct. 15, 1919.	Sept. 15, 1920.
		Cents.	Cents.	Cents.		
Sirloin steak.....	Pound.....	39.8	46.8	44.9	+13	— 4
Round steak.....	do.....	36.9	43.1	42.0	+14	— 3
Rib roast.....	do.....	30.6	34.5	33.3	+ 9	— 3
Chuck roast.....	do.....	24.5	27.1	25.9	+ 6	— 4
Plate beef.....	do.....	17.6	18.4	17.8	+ 1	— 3
Pork chops.....	do.....	44.3	50.0	50.0	+13	0
Bacon.....	do.....	52.8	54.5	51.6	+ 3	+ 0.2
Ham.....	do.....	52.4	60.4	59.8	+14	— 1
Lamb.....	do.....	33.9	39.1	37.9	+12	— 3
Hens.....	do.....	40.3	45.6	44.0	+ 9	— 4
Salmon, canned.....	do.....	34.8	39.0	39.0	+12	0
Milk, fresh.....	Quart.....	16.0	17.2	17.3	+ 8	+ 1
Milk, evaporated.....	15-16-oz. can.....	16.6	15.7	15.3	— 8	— 3
Butter.....	Pound.....	71.1	68.6	68.9	— 3	+ 0.4
Oleomargarine.....	do.....	42.6	41.9	41.5	— 3	— 1
Nut margarine.....	do.....	35.8	36.3	35.7	— 0.3	— 2
Cheese.....	do.....	42.4	40.6	40.6	— 4	0
Lard.....	do.....	36.1	27.9	29.2	—19	+ 5
Crisco.....	do.....	37.5	33.1	32.1	—14	— 3

¹ In addition to monthly retail prices of food and coal, the Bureau secures prices of gas and dry goods, from each of 51 cities and publishes these prices as follows: Gas in the June issue and dry goods in the April, July, October, and December issues of the MONTHLY LABOR REVIEW.

² The following are the 22 articles, weighted according to the consumption of the average family: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, tea. These include all articles for which prices have been secured each month since 1913 with the exception of lamb, for which the Bureau has no consumption figures.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE OCT. 15, 1920, COMPARED WITH SEPT. 15, 1920, AND OCT. 15, 1919—Concluded.

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (—) Oct. 15, 1920, compared with—	
		Oct. 15, 1919.	Sept. 15, 1920.	Oct. 15, 1920.	Oct. 15, 1919.	Sept. 15, 1920.
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Eggs, strictly fresh.....	Dozen.....	72.0	71.1	80.8	+12	+14
Eggs, storage.....	do.....	59.2	.....	64.4	+ 9	0
Bread.....	Pound.....	10.1	11.9	11.8	+17	- 1
Flour.....	do.....	7.3	8.3	7.8	+ 7	- 6
Corn meal.....	do.....	6.6	6.8	6.4	- 3	- 6
Rolled oats.....	do.....	9.2	11.5	11.6	+26	+ 1
Corn flakes.....	8-oz. package.....	14.1	14.5	14.4	+ 2	- 1
Cream of Wheat.....	28-oz. package.....	25.2	30.4	30.5	+21	+ 0.3
Macaroni.....	Pound.....	19.4	22.0	22.1	+14	+ 0.4
Rice.....	do.....	17.3	17.6	16.1	- 7	- 9
Beans, navy.....	do.....	12.5	11.6	10.9	-13	- 6
Potatoes.....	do.....	3.8	4.0	3.4	-11	-15
Onions.....	do.....	6.3	5.3	4.7	-25	-11
Cabbage.....	do.....	4.5	3.8	3.6	-20	- 5
Beans, baked.....	No. 2 can.....	17.1	16.8	16.7	- 2	- 1
Corn, canned.....	do.....	19.1	18.7	18.5	- 3	- 1
Peas, canned.....	do.....	19.1	19.3	19.2	+ 1	- 1
Tomatoes, canned.....	do.....	16.1	15.0	14.5	-10	- 3
Sugar, granulated.....	Pound.....	11.4	18.3	13.9	+22	-24
Tea.....	do.....	71.0	74.6	72.4	+ 2	- 3
Coffee.....	do.....	48.6	46.6	43.4	-11	- 7
Prunes.....	do.....	29.0	28.4	28.0	- 3	- 1
Raisins.....	do.....	20.9	30.8	31.4	+50	+ 2
Bananas.....	Dozen.....	39.3	47.8	46.5	+18	- 3
Oranges.....	do.....	55.3	70.8	71.3	+29	+ 1
22 weighted articles ¹.....	.....	.....	.....	.....	+ 5	- 3

¹ See note 2, page 25.

Table 2 shows for the United States average retail prices of specified food articles on October 15 of each year, 1913 to 1920, together with the percentage changes in October of each year compared with October, 1913. For example, the price of strictly fresh eggs, compared with the price in October, 1913, showed a 6 per cent decrease in October, 1914, and a 3 per cent decrease in October, 1915. In October, 1916, the price showed a 10 per cent increase; in October, 1917, a 33 per cent increase; in October, 1918, a 54 per cent increase; in October, 1919, a 73 per cent increase; and in October, 1920, a 94 per cent increase, as compared with the price in October, 1913.

The cost of 22 food articles, combined, showed an increase of 92 per cent in October, 1920, as compared with October, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, OCTOBER 15 OF EACH YEAR, 1914 TO 1920, COMPARED WITH OCTOBER 15, 1913.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail prices Oct. 15—								Per cent of increase (+) or decrease (-) Oct. 15 of each specified year compared with Oct. 15, 1913.							
		1913	1914	1915	1916	1917	1918	1919	1920	1914	1915	1916	1917	1918	1919	1920	
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.								
Sirloin steak.	Pound..	25.7	26.2	26.1	27.5	32.9	41.0	39.8	44.9	+ 2	+ 2	+ 7	+ 28	+ 60	+ 55	+ 72	
Round steak.	do.....	23.1	23.8	23.2	24.8	30.8	39.0	36.9	42.0	+ 3	+ 0.4	+ 7	+ 33	+ 69	+ 60	+ 85	
Rib roast.....	do.....	20.0	20.5	20.3	21.3	25.8	32.3	30.6	33.3	+ 3	+ 2	+ 7	+ 29	+ 62	+ 53	+ 67	
Chuck roast..	do.....	16.4	17.0	16.2	17.3	21.8	27.9	24.5	25.9	+ 4	- 1	+ 5	+ 33	+ 70	+ 49	+ 58	
Plate beef.....	do.....	12.3	12.8	12.0	12.8	16.5	21.5	17.6	17.8	+ 4	- 2	+ 4	+ 34	+ 75	+ 43	+ 45	
Pork chops....	do.....	22.6	23.0	23.1	24.8	38.9	45.4	44.3	50.0	+ 2	+ 2	+ 10	+ 72	+ 101	+ 96	+ 121	
Bacon.....	do.....	27.8	28.6	27.3	29.8	48.2	57.9	52.8	54.6	+ 3	- 2	+ 7	+ 73	+ 108	+ 90	+ 96	
Ham.....	do.....	27.6	28.3	26.5	30.6	42.6	52.0	52.4	59.8	+ 3	- 4	+ 11	+ 54	+ 88	+ 90	+ 117	
Lamb.....	do.....	18.4	19.3	20.9	22.5	31.6	35.2	33.9	37.9	+ 5	+ 14	+ 22	+ 72	+ 91	+ 84	+ 106	
Hens.....	do.....	21.2	21.4	20.6	24.3	31.1	39.0	40.3	44.0	+ 1	- 3	+ 15	+ 47	+ 84	+ 90	+ 108	
Salmon ¹	do.....	.....	.....	19.8	20.4	28.3	30.9	34.8	39.0	.....	.....	.....	.....	.....	.....	.....
Milk, fresh....	Quart..	9.0	9.0	8.9	9.4	12.7	14.8	16.0	17.3	0	- 1	+ 4	+ 41	+ 64	+ 78	+ 92	
Milk, evaporated.	15-16 oz. can.	.....	.....	.....	.....	.....	.....	16.6	15.3	.....	.....	.....	.....	.....	.....	.....
Butter.....	Pound..	38.2	37.6	35.1	41.6	50.9	65.1	71.1	68.9	- 2	- 8	+ 9	+ 33	+ 70	+ 86	+ 80	
Oleomargarine.	do.....	.....	.....	.....	.....	.....	.....	42.6	41.5	.....	.....	.....	.....	.....	.....	.....
Nut margarine.	do.....	.....	.....	.....	.....	.....	.....	35.8	35.7	.....	.....	.....	.....	.....	.....	.....
Cheese.....	do.....	22.4	23.0	22.9	26.9	34.9	38.5	42.4	40.6	+ 3	+ 2	+ 20	+ 56	+ 72	+ 89	+ 81	
Lard.....	do.....	16.0	15.5	14.3	19.4	31.3	34.2	36.1	29.2	- 3	- 11	+ 21	+ 96	+ 114	+ 126	+ 83	
Crisco.....	do.....	.....	.....	.....	.....	.....	.....	37.5	32.1	.....	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh.	Dozen..	41.6	39.0	40.3	45.6	55.2	64.1	72.0	80.8	- 6	- 3	+ 10	+ 33	+ 54	+ 73	+ 94	
Eggs, storage.	do.....	.....	.....	.....	.....	.....	.....	59.2	64.4	.....	.....	.....	.....	.....	.....	.....
Bread.....	Pound..	5.6	6.4	7.0	8.1	9.9	9.8	10.1	11.8	+ 14	+ 25	+ 45	+ 77	+ 75	+ 80	+ 111	
Flour.....	do.....	3.3	3.7	3.7	5.1	7.1	6.7	7.3	7.8	+ 12	+ 12	+ 55	+ 115	+ 103	+ 121	+ 136	
Corn meal.....	do.....	3.1	3.3	3.2	3.5	7.0	6.8	6.6	6.5	+ 6	+ 3	+ 13	+ 126	+ 119	+ 123	+ 110	
Rolled oats....	do.....	.....	.....	.....	.....	.....	.....	9.2	11.6	.....	.....	.....	.....	.....	.....	.....
Corn flakes....	8 oz.....	.....	.....	.....	.....	.....	.....	14.1	14.4	.....	.....	.....	.....	.....	.....	.....
Cream of Wheat.	28 oz....	.....	.....	.....	.....	.....	.....	25.2	30.5	.....	.....	.....	.....	.....	.....	.....
Macaroni.....	Pound..	.....	.....	.....	.....	.....	.....	19.4	22.1	.....	.....	.....	.....	.....	.....	.....
Rice.....	do.....	8.7	8.8	9.1	9.1	11.1	14.0	17.3	16.1	+ 1	+ 5	+ 5	+ 28	+ 61	+ 99	+ 85	
Beans, navy....	do.....	.....	.....	7.9	12.2	18.9	16.7	12.5	10.9	.....	.....	.....	.....	.....	.....	.....
Potatoes.....	do.....	1.8	1.5	1.6	2.8	3.0	3.5	3.8	3.4	- 17	- 11	+ 56	+ 67	+ 94	+ 111	+ 89	
Onions.....	do.....	.....	.....	3.3	4.7	4.9	4.5	6.3	4.7	.....	.....	.....	.....	.....	.....	.....
Cabbage.....	do.....	.....	.....	.....	.....	.....	.....	4.5	3.6	.....	.....	.....	.....	.....	.....	.....
Beans, baked.	No. 2 can.	.....	.....	.....	.....	.....	.....	17.1	16.7	.....	.....	.....	.....	.....	.....	.....
Corn, canned.	do.....	.....	.....	.....	.....	.....	.....	19.1	18.5	.....	.....	.....	.....	.....	.....	.....
Peas, canned.	do.....	.....	.....	.....	.....	.....	.....	19.1	19.2	.....	.....	.....	.....	.....	.....	.....
Tomatoes ¹	do.....	.....	.....	.....	.....	.....	.....	16.1	14.5	.....	.....	.....	.....	.....	.....	.....
Sugar, granulated.	Pound..	5.5	7.2	6.1	8.2	9.8	10.6	11.4	13.9	+ 31	+ 11	+ 49	+ 78	+ 93	+ 107	+ 153	
Tea.....	do.....	54.5	54.7	54.6	54.6	61.3	67.5	71.0	72.4	+ 0.4	+ 0.2	+ 0.2	+ 12	+ 24	+ 30	+ 33	
Coffee.....	do.....	29.7	29.6	29.9	29.9	30.5	30.5	48.6	43.4	- 0.3	+ 0.1	+ 0.1	+ 3	+ 3	+ 64	+ 46	
Prunes.....	do.....	.....	.....	13.4	13.5	16.5	18.3	29.0	28.0	.....	.....	.....	.....	.....	.....	.....
Raisins.....	do.....	.....	.....	12.5	13.0	14.9	15.5	20.9	31.4	.....	.....	.....	.....	.....	.....	.....
Bananas.....	Dozen..	.....	.....	.....	.....	.....	.....	39.3	46.5	.....	.....	.....	.....	.....	.....	.....
Oranges.....	do.....	.....	.....	.....	.....	.....	.....	55.3	71.3	.....	.....	.....	.....	.....	.....	.....
22 weighted articles. ²	.....	.....	.....	.....	.....	.....	.....	.....	.....	+ 2	- 1	+ 16	+ 51	+ 75	+ 83	+ 92

¹ Canned.

² See note 2, p. 25.

20097°-20-3

Table 3 shows the changes in the retail prices of each of 22 articles of food as well as the changes in the amounts of the articles that could be purchased for \$1, each year, 1913 to 1919, and in October, 1920.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1, 1913 TO OCTOBER, 1920.

Year.	Sirloin steak.		Round steak.		Rib roast.		Chuck roast.		Plate beef.		Pork chops.	
	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913.....	\$0.254	3.9	\$0.223	4.5	\$0.198	5.1	\$0.160	6.3	\$0.121	8.3	\$0.210	4.8
1914.....	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915.....	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916.....	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917.....	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918.....	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919.....	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920: October..	.449	2.2	.420	2.4	.333	3.0	.259	3.9	.178	5.6	.500	2.0
	Bacon.		Ham.		Lard.		Hens.		Eggs.		Butter.	
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per dz.	Dozs.	Per lb.	Lbs.
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per dz.	Dozs.	Per lb.	Lbs.
1913.....	\$0.270	3.7	\$0.269	3.7	\$0.158	6.3	\$0.213	4.7	\$0.345	2.9	\$0.383	2.6
1914.....	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915.....	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916.....	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917.....	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918.....	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919.....	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920: October..	.546	1.8	.598	1.7	.292	3.4	.440	2.3	.808	1.2	.689	1.5
	Cheese.		Milk.		Bread.		Flour.		Corn meal.		Rice.	
	Per lb.	Lbs.	Per qt.	Qts.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
	Per lb.	Lbs.	Per qt.	Qts.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913.....	\$0.221	4.5	\$0.089	11.2	\$0.056	17.9	\$0.033	30.3	\$0.030	33.3	\$0.087	11.5
1914.....	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915.....	.232	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916.....	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917.....	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918.....	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919.....	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920: October..	.406	2.5	.173	5.8	.118	8.5	.078	12.8	.064	15.6	.161	6.2
	Potatoes.		Sugar.		Coffee.		Tea.					
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.				
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.				
1913.....	\$0.017	58.8	\$0.055	18.2	\$0.298	3.4	\$0.544	1.8				
1914.....	.018	55.6	.059	16.9	.297	3.4	.546	1.8				
1915.....	.015	66.7	.066	15.2	.300	3.3	.545	1.8				
1916.....	.027	37.0	.080	12.5	.299	3.3	.546	1.8				
1917.....	.043	23.3	.093	10.8	.302	3.3	.582	1.7				
1918.....	.032	31.3	.097	10.3	.305	3.3	.648	1.5				
1919.....	.038	26.3	.113	8.8	.433	2.3	.701	1.4				
1920: October..	.034	29.4	.139	7.2	.434	2.3	.724	1.4				

Relative Retail Prices of 22 Articles of Food.

IN Table 4 the average monthly and yearly prices of 22 food articles³ are shown as relative prices or percentages of the average prices for the year 1913. These relatives are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. Relative prices must be used with caution. For example, the relative price of pork chops in November, 1919, was 200, which means that the money price was 200 per cent of the money price in 1913, or, in other words, the price doubled. The relative price of pork chops in December was 181, showing a drop of 19 points from 200, which is a decrease of only 9.5 per cent.

In the last column of this table are given index numbers⁴ showing the changes by months and years in the retail cost of the 22 food articles weighted according to the importance of each article in the consumption of the average family. Prices are obtained each month for 43 food articles, but only 22 of these are included in the retail food price index, because the amounts consumed by the average family have been obtained as yet for only these 22 food articles. These articles comprise about two-thirds of the entire food budget of the average family and reflect with great accuracy changes in the cost of the food budget. The figure representing the cost of these 22 food articles was 203 in September and 198 in October. This shows that, as compared with 1913, the cost of these food articles in October, 1920, was almost double what it was in 1913, and that during the month from September to October there was a decrease of approximately 3 per cent.

The curve shown in the chart on page 33 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The decreases in the cost of these articles since July brings the curve down in October to a point slightly above that in December, 1919. The chart has been drawn on the logarithmic scale,⁵ because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

³ For list of articles, see note 2, p. 25.

⁴ For a discussion of the method used in the computation of these index figures, see MONTHLY LABOR REVIEW for March, 1920, p. 34.

⁵ For a discussion of the logarithmic chart, see article on "Comparison of arithmetic and ratio charts," by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 29-34. Also, "The 'ratio' chart," by Prof. Irving Fisher, reprinted from Quarterly Publications of the American Statistical Association, June, 1917, 24 pp.

TABLE 4.—RELATIVE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, 1907 TO OCTOBER, 1920.

[Average for year 1913=100.]

Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast.	Plate beef. chops.	Pork chops.	Ba- con.	Ham.	Lard.	Hens.	Eggs.	But- ter.	Cheese.	Milk.	Bread.	Flour.	Corn meal.	Rice.	Pota- toes.	Su- gar.	Cof- fee.	Tea.	22 weight- ed arti- cles.
1907.....	71	68	76	.....	.....	74	74	76	81	81	84	85	.....	87	.....	95	88	.....	105	105	.....	.....	82
1908.....	73	71	78	.....	.....	76	77	78	80	83	86	86	.....	90	.....	102	92	.....	111	108	.....	.....	84
1909.....	77	74	81	.....	.....	83	83	82	90	89	93	90	.....	91	.....	109	94	.....	112	107	.....	.....	89
1910.....	80	78	85	.....	.....	92	95	91	104	94	98	94	.....	95	.....	108	95	.....	101	109	.....	.....	93
1911.....	81	79	85	.....	.....	85	91	89	88	91	93	88	.....	96	.....	102	94	.....	130	111	.....	.....	92
1912.....	91	89	94	.....	.....	91	91	91	94	93	99	98	.....	97	.....	115	102	.....	132	115	.....	.....	98
1913: Av. for year.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
January.....	94	92	95	93	92	89	94	93	97	95	108	107	100	100	100	100	99	99	91	106	100	100	100
February.....	94	93	95	93	93	90	95	94	98	97	91	108	100	100	100	100	98	99	90	100	100	100	98
March.....	97	96	98	98	98	97	97	97	99	100	77	108	100	100	100	100	98	99	88	99	100	100	97
April.....	101	99	101	101	101	103	99	99	100	104	73	106	100	100	100	100	98	99	89	98	100	100	97
May.....	101	100	101	101	101	100	100	100	100	104	76	94	99	99	100	101	98	99	91	97	100	100	97
June.....	102	101	102	102	101	99	101	102	100	103	81	92	99	99	100	101	98	99	104	97	100	100	97
July.....	104	104	102	103	101	103	104	104	101	102	87	91	99	99	100	101	98	100	110	100	100	100	98
August.....	104	104	102	103	101	104	105	106	102	101	96	92	100	99	100	100	100	100	109	102	100	100	100
September.....	103	104	101	103	102	108	104	104	102	101	109	98	100	100	100	100	102	100	110	104	100	100	101
October.....	101	104	101	103	102	107	103	102	101	100	120	100	101	101	100	99	103	100	106	101	100	100	102
November.....	100	102	100	102	102	102	101	100	101	97	144	101	102	102	100	99	104	100	107	99	100	100	105
December.....	99	101	100	101	102	97	99	99	100	98	138	104	102	102	100	99	104	100	106	98	100	100	104
1914: Av. for year.	102	106	103	104	104	105	102	102	99	102	102	94	104	100	112	104	105	101	108	108	100	100	102
January.....	99	102	100	102	102	99	98	98	100	100	126	104	104	102	110	98	104	100	108	95	99	100	104
February.....	99	102	101	103	102	100	98	99	99	104	106	93	104	102	110	99	103	100	108	94	99	100	101
March.....	100	103	101	102	102	100	99	99	99	105	90	92	105	101	110	99	103	100	107	93	100	100	99
April.....	100	103	102	103	102	103	99	99	99	108	74	86	104	100	110	99	103	100	105	91	100	100	97
May.....	102	105	102	103	103	106	99	99	99	106	77	85	103	100	110	99	103	100	112	91	100	101	98
June.....	103	106	103	104	103	103	100	100	97	103	82	88	103	100	100	99	103	100	132	93	100	101	99
July.....	106	109	105	106	104	106	101	103	97	103	87	89	103	100	110	98	103	101	135	95	99	101	102
August.....	110	113	108	109	107	119	107	108	99	104	96	94	103	100	112	106	105	101	111	143	100	101	107
September.....	107	110	105	108	107	113	108	108	99	103	107	98	104	100	114	113	109	101	105	145	100	101	107
October.....	103	107	104	106	106	110	106	105	98	100	113	98	104	101	114	111	109	101	89	132	99	101	105
November.....	100	105	103	104	105	104	104	102	99	97	131	103	104	101	114	112	109	101	83	113	99	101	105
December.....	101	103	101	103	103	93	103	100	97	94	139	103	104	101	116	113	107	101	84	110	99	101	105
1915: Av. for year.	101	103	101	101	100	96	100	97	93	97	99	93	105	99	124	126	108	104	89	120	101	100	101
January.....	100	102	101	101	102	88	101	98	97	85	129	101	105	101	120	124	109	104	85	110	101	100	103
February.....	98	100	100	99	101	85	99	96	97	97	98	98	106	100	126	138	110	104	84	118	101	100	101
March.....	97	99	99	98	100	85	95	95	96	99	74	94	106	99	126	136	110	104	82	120	101	100	98
April.....	99	100	100	99	100	94	98	94	96	100	75	94	105	99	126	137	109	104	86	122	101	100	99

[11501]

101	103	101	101	101	95	96	101	76	91	106	98	128	139	109	104	89	124	101	100	100
103	105	103	103	103	98	95	98	78	90	106	98	128	130	109	104	99	126	101	100	100
105	107	104	103	101	100	98	93	81	90	105	98	126	125	109	104	85	127	101	100	100
104	107	104	103	101	100	98	89	88	88	103	90	126	124	108	104	82	123	101	100	100
104	106	103	102	101	100	97	88	101	88	103	99	124	117	108	104	79	118	100	100	100
103	104	102	101	99	100	99	91	117	92	104	100	124	113	108	104	94	111	100	100	103
101	102	101	99	98	100	100	92	133	95	105	100	122	113	107	104	97	119	100	100	104
99	101	100	99	98	87	101	92	135	101	107	100	122	114	107	104	106	124	100	100	105
108	110	107	107	106	108	108	108	109	103	117	102	130	135	113	105	159	146	100	100	114
101	102	101	99	99	89	101	93	101	123	100	110	122	130	107	105	136	123	100	100	107
101	102	102	102	102	92	101	94	104	101	99	112	124	125	108	104	141	125	100	100	106
104	104	104	103	104	104	103	104	107	82	105	113	124	120	107	104	138	145	100	100	107
106	108	106	106	105	107	104	107	100	79	108	113	124	119	108	104	138	145	100	100	109
109	112	110	109	107	109	105	109	106	82	97	112	124	119	108	104	140	156	100	100	109
113	117	113	111	110	110	107	110	108	87	95	111	124	117	108	105	167	158	100	100	112
113	116	112	112	109	111	107	111	107	93	93	110	124	116	108	105	134	160	100	100	111
112	115	111	110	107	116	108	111	111	105	95	111	126	134	110	105	141	155	100	100	113
111	115	110	110	107	125	110	114	118	120	102	116	136	148	113	105	161	141	100	100	118
108	111	108	108	106	118	110	114	123	132	109	122	144	155	117	105	165	149	100	100	121
106	108	106	107	106	111	111	111	135	149	114	132	150	174	126	105	198	157	100	100	126
106	107	106	106	106	106	110	110	137	154	118	140	138	167	131	105	198	151	100	100	126
124	130	126	131	130	152	152	142	175	139	127	150	164	211	192	119	253	169	101	107	146
109	111	109	109	108	113	110	114	136	119	158	141	140	171	132	105	225	146	100	100	128
113	117	114	116	125	114	118	125	151	122	142	112	142	171	136	104	290	148	100	100	133
116	119	118	128	121	133	123	125	151	129	101	121	144	174	137	104	297	160	101	101	133
125	130	127	131	132	146	141	136	167	136	112	133	150	206	157	108	339	175	101	101	145
127	133	130	134	135	146	155	144	176	138	116	122	153	206	178	121	352	183	101	103	151
129	135	132	137	137	148	158	145	177	136	119	123	153	246	182	125	366	170	101	104	152
129	137	130	137	136	151	159	147	174	131	122	120	149	220	195	123	246	166	103	110	146
130	138	129	136	134	164	160	147	176	131	134	124	148	229	219	122	206	181	102	111	149
131	133	131	137	135	185	164	152	188	142	152	129	132	223	272	124	172	179	102	112	153
130	138	130	136	136	185	178	159	198	146	160	133	158	214	232	128	178	177	102	113	157
124	133	127	132	134	165	179	159	207	138	168	138	144	208	235	131	183	174	102	114	155
126	134	128	134	134	161	181	161	211	143	184	142	156	205	235	133	178	172	102	114	157
153	165	155	165	170	186	196	178	211	177	165	151	156	203	227	148	188	176	102	110	167
129	137	130	138	142	163	180	162	208	154	195	148	151	200	233	134	188	173	102	115	160
132	141	133	142	146	160	179	163	209	170	182	151	158	200	233	136	188	193	102	112	161
133	143	135	145	150	161	181	164	210	(1)	128	144	159	200	240	138	147	167	102	113	154
144	155	148	159	164	170	183	166	209	(1)	123	132	154	200	237	139	129	165	101	117	154
157	170	161	174	181	175	187	170	208	178	123	133	151	200	233	141	129	165	101	117	158
168	182	169	184	188	177	191	173	206	177	123	133	146	203	223	144	171	165	101	119	162
166	181	168	182	185	180	194	181	206	178	142	137	152	203	223	148	229	167	101	120	167
163	178	165	177	179	201	200	180	209	181	155	141	157	206	227	154	229	169	101	121	171
164	178	165	178	181	220	208	193	213	185	170	155	163	206	230	157	229	175	102	122	178
161	175	163	174	178	216	214	216	214	183	186	170	174	203	227	161	206	193	102	124	181
159	173	162	172	175	206	216	195	216	185	215	174	184	203	217	161	194	196	103	125	183
159	171	161	171	174	197	217	198	216	180	235	190	176	203	213	160	188	196	109	124	187

¹ No hens sold in this month by order of Food Administration.

TABLE 4.—RELATIVE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, 1907 TO OCTOBER, 1920—Concluded.

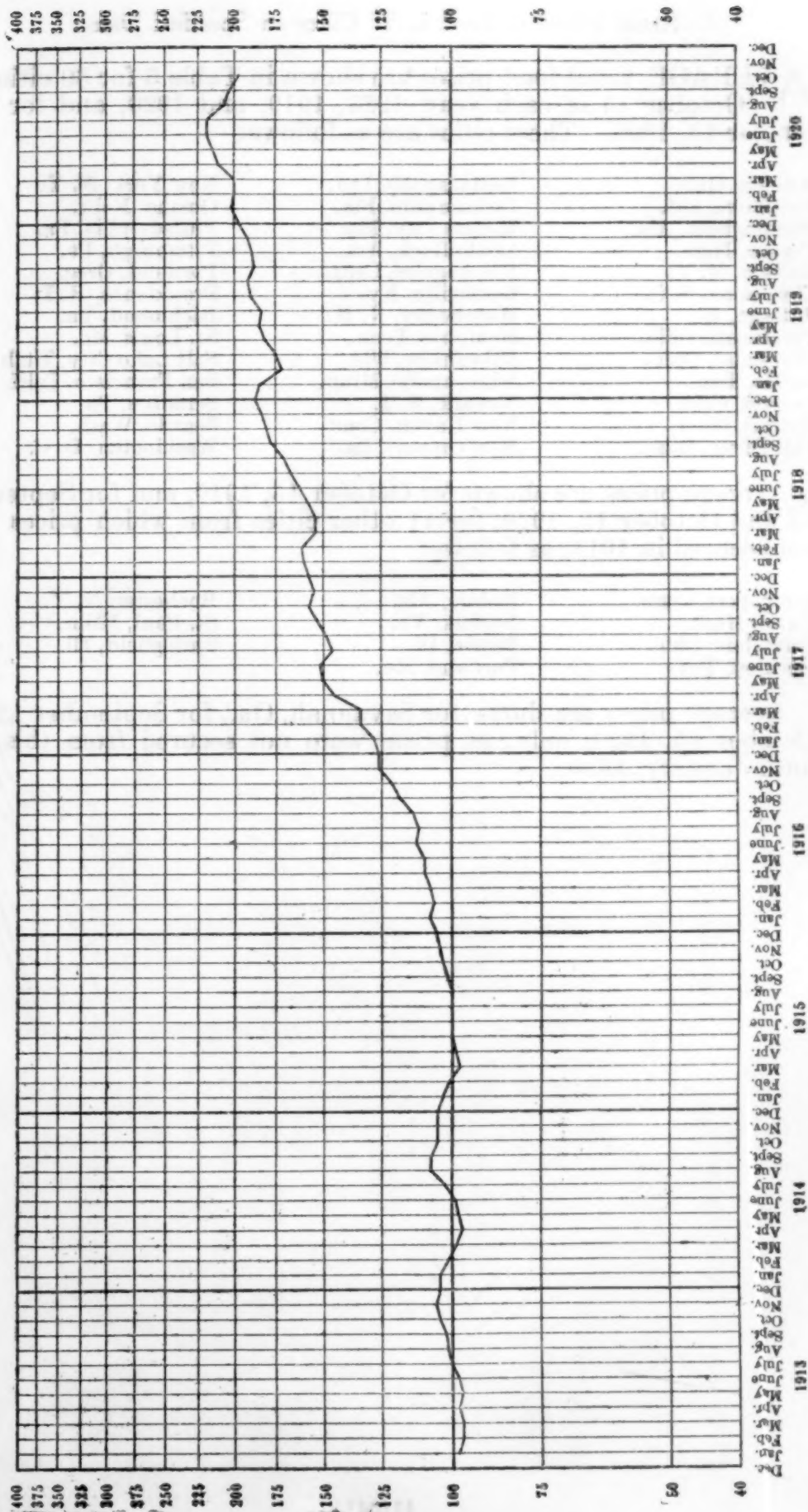
[Average for year 1913=100.]

Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast.	Plate beef, chops.	Pork con.	Ham.	Lard.	Hens.	Eggs.	But- ter.	Cheese.	Milk.	Bread.	Flour.	Corn meal.	Rice.	Pota- toes.	Su- gar.	Col- fee.	Tee.	22 weight- ed arti- cles.
1919: Av. for year:	164	174	164	169	167	201	299	134	193	182	177	193	174	179	218	213	174	224	205	145	129	186
January.....	162	175	165	175	181	193	199	211	188	218	184	201	175	175	200	207	159	188	196	117	127	185
February.....	162	174	165	174	181	180	205	203	186	147	149	185	174	175	203	200	164	182	195	123	126	172
March.....	165	177	169	178	183	184	203	211	193	140	174	183	172	175	205	197	154	171	193	126	129	175
April.....	172	182	175	184	187	197	212	223	202	143	186	190	169	175	218	200	154	182	193	129	128	182
May.....	175	187	178	186	186	205	210	246	204	154	177	191	167	175	227	207	154	194	193	136	128	185
June.....	170	181	171	176	174	202	215	254	200	155	165	192	167	177	227	210	159	224	193	143	129	184
July.....	171	183	169	173	168	220	215	266	197	164	164	195	169	179	227	217	168	282	198	155	130	190
August.....	166	177	164	166	160	223	214	266	196	174	167	187	174	180	224	220	178	294	202	160	130	192
September.....	161	170	158	158	150	219	206	242	194	183	172	195	176	180	221	223	190	253	200	164	130	188
October.....	157	165	155	153	145	211	196	228	189	209	186	192	180	180	221	220	199	224	207	163	131	189
November.....	155	162	153	151	143	200	189	231	184	235	197	195	184	182	224	220	202	229	227	164	131	192
December.....	154	161	153	152	143	181	186	221	184	261	204	196	188	182	233	220	202	233	264	164	127	197
1920:																						
January.....	159	166	159	158	152	178	187	215	197	240	194	196	187	195	245	220	208	318	324	165	132	201
February.....	160	167	159	157	152	180	186	204	210	199	190	196	188	198	245	217	210	353	342	165	131	200
March.....	161	168	161	157	150	186	190	192	215	161	196	194	187	200	242	217	211	400	340	165	135	200
April.....	170	179	169	166	157	206	191	191	224	153	199	194	183	200	245	217	214	535	367	165	135	211
May.....	171	179	169	166	155	202	195	189	221	153	187	194	182	205	264	223	215	565	462	165	136	215
June.....	182	191	176	174	157	194	200	185	216	155	175	189	182	211	267	230	215	606	485	165	136	219
July.....	192	202	181	179	158	208	203	184	211	166	177	186	188	213	264	233	214	524	482	165	137	219
August.....	186	196	176	172	154	219	203	177	212	184	175	183	191	213	255	230	210	294	416	162	137	207
September.....	185	193	175	170	152	238	224	177	214	206	179	184	193	213	252	227	202	229	333	153	137	203
October.....	177	188	168	162	147	238	202	185	207	234	180	184	194	211	236	213	185	200	253	146	133	198

[1152]

TREND IN RETAIL COST OF 22 FOOD ARTICLES COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO OCTOBER, 1920.

[Average cost for 1913=100.]



Retail Prices of Food in 51 Cities on Specified Dates.

AVERAGE retail food prices are shown in Table 5 for 39 cities for October 15 of each year, 1913, 1919, and 1920, and for September 15, 1920. These cities are as follows:

Atlanta, Ga.	Indianapolis, Ind.	New York, N. Y.
Baltimore, Md.	Jacksonville, Fla.	Omaha, Nebr.
Birmingham, Ala.	Kansas City, Mo.	Philadelphia, Pa.
Boston, Mass.	Little Rock, Ark.	Pittsburgh, Pa.
Buffalo, N. Y.	Los Angeles, Calif.	Portland, Oreg.
Charleston, S. C.	Louisville, Ky.	Providence, R. I.
Chicago, Ill.	Manchester, N. H.	Richmond, Va.
Cincinnati, Ohio.	Memphis, Tenn.	St. Louis, Mo.
Cleveland, Ohio.	Milwaukee, Wis.	Salt Lake City, Utah.
Dallas, Tex.	Minneapolis, Minn.	San Francisco, Calif.
Denver, Colo.	Newark, N. J.	Scranton, Pa.
Detroit, Mich.	New Haven, Conn.	Seattle, Wash.
Fall River, Mass.	New Orleans, La.	Washington, D. C.

Average prices are shown for October 15, 1919, and for September 15 and October 15, 1920, for 11 other cities from which prices were not secured in 1913, as follows:

Bridgeport, Conn.	Mobile, Ala.	Rochester, N. Y.
Butte, Mont.	Norfolk, Va.	St. Paul, Minn.
Columbus, Ohio.	Peoria, Ill.	Springfield, Ill.
Houston, Tex.	Portland, Me.	

Average prices are shown for Savannah, Ga., for September 15 and October 15, 1920, only, as prices were not secured from this city until January, 1920.

Published Weekly, excepting the last two issues which are published bi-weekly

Subscription price, Five Dollars per Annum in Advance

Single Copies, Fifteen Cents

Published for the Association by

AMERICAN MEDICAL ASSOCIATION

535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 26, 1917

Postage paid at Chicago, Ill., and at additional mailing offices

Acceptance for mailing at special rate of postage provided for in

Act of October 3, 1917, authorized on July 26, 1918

Postage paid by addressee

Copyright, 1921, by American Medical Association

Printed at the American Medical Association Press, Chicago, Ill.

Volume 44, Number 1, January 1, 1921

Published by the American Medical Association

535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 26, 1917

Postage paid at Chicago, Ill., and at additional mailing offices

Acceptance for mailing at special rate of postage provided for in

Act of October 3, 1917, authorized on July 26, 1918

Postage paid by addressee

Copyright, 1921, by American Medical Association

Printed at the American Medical Association Press, Chicago, Ill.

Volume 44, Number 1, January 1, 1921

Published by the American Medical Association

535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 26, 1917

Postage paid at Chicago, Ill., and at additional mailing offices

Acceptance for mailing at special rate of postage provided for in

Act of October 3, 1917, authorized on July 26, 1918

Postage paid by addressee

Copyright, 1921, by American Medical Association

Printed at the American Medical Association Press, Chicago, Ill.

Volume 44, Number 1, January 1, 1921

Published by the American Medical Association

535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 26, 1917

Postage paid at Chicago, Ill., and at additional mailing offices

Acceptance for mailing at special rate of postage provided for in

Act of October 3, 1917, authorized on July 26, 1918

Postage paid by addressee

Copyright, 1921, by American Medical Association

Printed at the American Medical Association Press, Chicago, Ill.

Volume 44, Number 1, January 1, 1921

Published by the American Medical Association

535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 26, 1917

Postage paid at Chicago, Ill., and at additional mailing offices

Acceptance for mailing at special rate of postage provided for in

Act of October 3, 1917, authorized on July 26, 1918

Postage paid by addressee

Copyright, 1921, by American Medical Association

Printed at the American Medical Association Press, Chicago, Ill.

Volume 44, Number 1, January 1, 1921

Published by the American Medical Association

535 North Dearborn Street, Chicago, Ill.

Entered as Second-Class Matter, May 26, 1917

Postage paid at Chicago, Ill., and at additional mailing offices

Acceptance for mailing at special rate of postage provided for in

Act of October 3, 1917, authorized on July 26, 1918

Postage paid by addressee

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

[The prices shown in this table are computed from reports sent monthly to the Bureau by retail dealers;

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920
		1913	1919			1913	1919			1913	1919		
Sirloin steak.....	Pound.....	Cts. 24.2	Cts. 37.8	Cts. 41.1	Cts. 40.8	Cts. 23.5	Cts. 39.8	Cts. 46.1	Cts. 44.0	Cts. 28.5	Cts. 39.1	Cts. 45.6	Cts. 45.1
Round steak.....	do.....	21.3	34.4	38.9	38.2	22.0	38.7	44.5	42.6	23.0	37.3	42.2	41.4
Rib roast.....	do.....	19.7	27.9	31.3	30.9	17.3	31.5	35.0	34.3	20.5	31.7	33.5	33.1
Chuck roast.....	do.....	15.4	21.9	24.6	24.6	15.3	25.7	28.0	26.5	16.5	26.4	28.0	27.4
Plate beef.....	do.....	9.6	16.2	17.7	17.7	12.6	19.3	18.3	17.9	10.4	17.6	18.1	17.6
Pork chops.....	do.....	25.0	41.7	47.5	48.1	19.6	43.2	49.8	46.4	24.6	43.0	48.0	48.7
Bacon.....	do.....	32.2	57.2	57.3	57.0	22.5	49.4	47.7	47.5	35.0	58.3	62.4	61.7
Ham.....	do.....	30.8	53.8	59.7	59.2	28.5	56.8	64.0	63.6	32.0	55.0	63.1	62.3
Lamb.....	do.....	20.2	36.1	38.9	39.1	18.0	34.5	39.8	39.0	21.9	37.5	45.5	44.0
Hens.....	do.....	20.8	40.0	41.7	42.4	20.8	43.6	47.4	45.2	20.0	38.2	38.2	41.3
Salmon (canned).....	do.....		28.2	29.4	28.2		32.5	35.3	35.3		34.7	41.6	40.4
Milk, fresh.....	Quart.....	10.6	22.5	25.0	25.0	8.7	16.0	16.0	16.0	10.0	25.0	25.0	25.0
Milk, evaporated.....	15-16 oz. can.....		17.4	17.4	17.1		16.1	14.8	14.5		17.7	16.7	16.3
Butter.....	Pound.....	39.0	74.1	70.8	73.3	38.8	72.1	71.4	72.8	40.0	75.0	72.7	73.1
Oleomargarine.....	do.....		44.3	46.0	46.0		40.8	41.2	41.0		44.6	44.9	44.1
Nut margarine.....	do.....		38.7	39.4	39.4		36.2	35.5	35.1		40.1	40.8	40.0
Cheese.....	do.....	25.0	39.9	39.8	40.0	23.3	42.8	40.4	41.0	23.0	40.0	41.1	40.9
Lard.....	do.....	15.4	35.1	28.8	30.3	14.8	34.1	27.0	29.4	15.2	36.0	28.0	28.9
Crisco.....	do.....		35.1	32.3	31.5		34.4	29.2	28.9		37.8	34.4	33.6
Eggs, strictly fresh.....	Dozen.....	34.1	64.7	69.0	69.7	36.3	65.5	67.4	75.9	35.0	59.3	65.8	68.6
Eggs, storage.....	do.....		60.0				57.7		59.3		55.0		64.4
Bread.....	Pound.....	5.9	10.0	12.8	12.8	5.5	9.6	11.4	10.8	5.4	9.6	11.5	11.5
Flour.....	do.....	3.5	7.2	8.3	8.1	3.2	7.5	8.2	7.7	3.6	7.5	8.7	8.5
Corn meal.....	do.....	2.7	5.7	6.0	5.1	2.6	5.8	5.7	5.3	2.4	5.3	5.7	5.0
Rolled oats.....	do.....		10.5	12.7	12.2		8.2	10.4	11.3		11.1	13.6	14.0
Corn flakes.....	8-oz. pkg.....		14.0	14.9	14.7		13.0	13.7	13.5		14.7	15.0	14.9
Cream of Wheat.....	28-oz. pkg.....		24.7	31.6	31.6		23.4	29.2	29.1		25.7	33.6	33.3
Macaroni.....	Pound.....		20.3	22.4	23.9		18.2	21.3	21.6		20.8	23.5	23.1
Rice.....	do.....	8.6	17.0	16.7	14.4	9.0	18.3	16.7	15.6	8.2	17.5	16.7	15.9
Beans, navy.....	do.....		15.0	13.5	12.8		12.2	10.9	10.6		15.0	13.8	13.2
Potatoes.....	do.....	2.3	5.0	5.5	4.5	1.8	3.8	3.6	3.2	2.2	4.9	5.0	4.4
Onions.....	do.....		8.4	7.5	6.4		5.8	4.8	4.1		7.6	5.6	5.4
Cabbage.....	do.....		6.2	5.1	5.0		3.8	2.2	2.8		5.5	5.4	5.2
Beans, baked.....	No. 2 can.....		16.1	15.8	15.7		16.1	14.9	14.9		18.4	18.4	18.0
* Corn, canned.....	do.....		20.3	20.1	20.2		19.1	18.6	18.0		19.2	19.9	19.3
Peas, canned.....	do.....		20.4	20.1	20.1		18.7	18.7	18.4		22.0	21.3	21.2
Tomatoes, canned.....	do.....		14.2	14.5	14.1		14.6	13.5	12.8		14.8	14.5	14.0
Sugar, granulated.....	Pound.....	5.8	11.8	19.4	14.9	4.9	10.9	18.0	13.7	5.7	11.6	18.7	14.8
Tea.....	do.....	60.0	87.1	95.4	94.2	56.0	73.0	70.4	69.2	61.3	89.1	88.7	87.5
Coffee.....	do.....	32.0	49.8	48.4	44.3	24.4	45.0	42.1	40.5	28.8	49.5	49.6	45.7
Prunes.....	do.....		25.3	28.3	28.3		29.5	26.4	26.2		33.3	30.0	30.2
Raisins.....	do.....		21.0	26.5	28.3		21.9	31.7	32.9		20.4	30.7	32.5
Bananas.....	Dozen.....		31.8	43.8	37.1		33.5	38.1	33.5		40.0	46.2	46.7
Oranges.....	do.....		54.1	70.0	70.8		59.1	68.6	68.8		50.3	66.1	55.0

* The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in his report, but in this city it is called "sirloin" steak.

CLES OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES.

assome dealers occasionally fail to report, the number of quotations varies from month to month.]

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15, 1919	Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15, 1919	Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920
1913	1919						1913	1919						1913	1919		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
35.0	60.7	71.1	69.3	50.3	56.4	52.5	22.3	37.3	44.3	41.5	31.8	38.4	37.1	21.8	37.0	41.3	41.5
35.0	55.7	67.9	65.3	47.8	53.3	49.8	19.3	34.0	40.0	37.3	26.7	34.0	32.7	20.4	36.4	41.3	41.6
25.6	39.9	45.7	44.9	36.5	40.7	37.7	16.5	29.9	33.3	32.0	24.9	28.4	28.4	20.0	30.0	32.7	33.0
18.0	30.7	36.2	34.4	28.5	30.9	29.4	15.0	25.0	26.6	25.7	17.4	22.7	22.4	15.0	24.2	27.7	26.8
				15.5	14.7	13.9	11.5	18.3	18.3	17.5	11.8	15.7	16.2	12.1	18.8	22.5	21.8
24.4	49.9	56.0	57.1	47.7	49.2	52.5	21.0	42.9	52.5	52.3	44.2	49.1	50.8	26.0	44.4	49.6	53.2
25.4	48.9	50.1	51.1	55.2	60.4	60.5	22.3	43.3	47.5	47.5	62.0	64.0	62.7	26.6	56.0	54.0	55.8
31.3	56.9	70.4	70.3	60.3	73.4	73.0	26.7	51.5	56.3	57.9	59.6	65.0	64.9	28.8	52.3	57.5	56.9
20.5	37.4	43.4	41.6	36.2	40.8	40.1	15.3	26.7	31.9	31.8	27.7	33.4	32.3	22.5	39.2	45.0	44.7
25.6	45.5	52.2	51.9	44.0	47.6	46.4	21.0	39.1	45.8	43.0	32.8	43.3	42.4	21.9	4.92	49.9	50.0
	33.3	37.2	37.0	37.8	39.6	40.6		32.3	36.1	36.3	44.0	44.4	44.8		32.4	37.1	36.3
8.9	16.4	18.5	18.4	16.0	18.0	18.0	8.0	16.0	17.0	17.0	15.5	15.8	15.8	12.0	23.5	23.7	23.3
	16.7	15.8	15.8	16.8	15.4	15.2		16.0	14.7	14.4	17.9	16.7	16.4		16.7	15.5	15.2
38.0	68.3	68.8	69.4	66.3	66.7	67.9	37.1	70.0	66.5	68.3	68.7	70.1	69.5	38.2	68.6	67.5	68.0
	42.5	44.1	43.8	41.8	39.5	40.9		41.6	40.4	40.7	45.0	40.0	40.0		45.0	44.2	43.5
	35.8	36.5	36.0	35.4	35.4	35.6		34.0	34.4	34.0		39.7	39.7		45.7	40.3	38.3
23.1	42.2	41.1	40.9	42.6	41.1	41.5	21.5	40.9	38.8	39.1	44.7	42.8	42.5	21.0	41.2	38.0	39.4
15.7	37.1	28.2	29.5	35.8	26.0	28.0	14.4	33.4	25.9	27.9	38.8	32.6	33.1	15.3	37.3	27.5	28.8
	36.1	32.3	32.5	36.5	31.4	30.9		36.0	30.5	29.7	43.7	42.8	41.7		37.9	33.3	32.3
53.3	92.9	95.3	105.7	87.6	87.7	96.4	36.6	72.7	69.2	80.4	73.9	76.1	80.6	35.0	56.7	60.8	68.5
	62.5		66.3	60.2		66.5		57.6		61.1	60.0		66.4		54.8		59.4
6.0	9.6	11.3	11.3	10.7	12.7	12.7	5.6	10.0	11.4	11.5	12.3	14.3	12.8	5.9	10.0	13.6	13.2
3.6	7.8	8.9	8.3	7.3	8.3	8.0	3.0	6.9	7.7	7.1	8.0	8.9	8.8	3.8	7.8	9.0	9.0
3.5	7.8	7.7	7.7	7.9	8.8	9.0	2.5	6.2	6.7	6.5	7.9	7.8	7.8	2.6	5.7	5.6	5.2
	8.1	10.3	10.6	9.8	11.2	11.7		7.6	9.8	9.1	9.3	10.2	10.3		10.4	11.3	12.5
	14.0	14.4	14.4	13.5	14.0	13.7		13.1	13.1	13.2	14.6	15.3	15.3		14.9	14.9	14.8
	24.7	30.3	30.5	23.9	28.9	29.3		24.0	28.1	28.3	30.0	33.5	33.9		25.0	30.3	30.3
	21.6	26.0	25.6	22.7	25.2	25.0		20.0	23.0	22.9	20.0	22.4	22.1		21.1	23.0	23.7
9.4	17.1	19.0	18.1	16.9	17.7	16.5	9.3	17.4	17.5	16.3	15.3	18.6	16.5	5.6	14.4	13.9	11.7
	11.7	10.8	10.4	11.8	11.9	11.6		11.6	11.3	10.9	13.4	11.9	11.5		14.5	14.5	14.3
1.7	3.2	3.3	3.1	3.4	2.6	3.1	1.7	3.0	2.9	2.6	2.7	2.9	2.5	2.2	4.7	4.1	3.6
	6.1	5.2	4.3	6.2	5.5	4.7		6.3	4.6	4.2	5.7	4.5	4.6		7.5	5.3	5.2
	3.8	4.7	4.3	4.3	3.8	3.5		4.9	2.0	1.7	4.8	4.8	3.8		6.4	5.0	4.7
	17.6	18.4	18.0	16.5	15.3	15.2		13.9	14.3	14.2	22.4	22.2	22.0		15.4	14.8	14.6
	21.3	21.4	20.9	21.9	21.7	21.4		18.4	17.9	18.0	18.4	18.6	18.6		21.2	19.1	19.1
	20.6	22.1	22.2	20.5	22.2	22.2		17.5	17.7	17.5	18.6	18.5	18.5		22.1	21.8	21.8
	17.0	15.3	15.5	16.3	15.1	14.2		16.3	15.8	15.3	18.0	16.7	16.3		15.6	14.7	14.0
5.4	10.9	19.3	13.2	11.0	17.8	14.1	5.4	10.9	19.8	14.4	12.4	18.2	16.2	5.0	10.9	20.5	14.5
58.6	66.3	69.9	69.9	63.0	65.6	64.9	45.0	66.2	68.4	68.2	75.0	77.5	76.9	50.0	81.2	79.4	79.6
33.0	53.0	52.0	49.5	46.7	45.6	42.1	2.93	46.2	43.7	43.7	58.1	58.8	58.4	26.8	47.6	45.8	42.7
	31.8	29.0	29.3	29.9	27.1	26.7		28.7	27.2	27.6	27.0	29.6	29.1		29.2	29.9	28.1
	20.8	29.7	31.9	21.8	29.0	30.8		18.8	29.2	31.8	19.4	31.4	31.5		21.3	29.9	31.4
	44.6	56.9	56.2	38.7	48.5	45.9		42.3	49.8	50.8	47.5	63.3	63.3		42.9	48.6	53.8
	62.1	75.6	72.8	61.0	75.8	76.9		60.2	73.1	73.2	53.8	73.8	75.0		51.5	68.0	83.6

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920
		1913	1919			1913	1919			1913	1919		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound....	24.8	36.6	48.4	47.3	23.3	30.8	40.3	38.3	25.4	37.6	47.8	45.3
Round steak.....	do.....	21.6	32.5	40.0	39.0	21.0	29.8	37.7	35.7	22.9	34.5	42.5	40.5
Rib roast.....	do.....	20.1	28.9	35.8	35.0	19.2	25.4	32.2	31.6	18.7	28.3	32.3	31.2
Chuck roast.....	do.....	15.8	24.3	27.9	27.0	16.1	19.2	23.3	22.7	16.9	24.3	28.4	27.2
Plate beef.....	do.....	12.0	17.0	18.9	19.1	12.2	17.5	19.0	19.1	12.2	17.4	17.6	17.1
Pork chops.....	do.....	21.0	41.0	48.1	46.0	23.7	40.8	50.5	48.2	23.0	44.9	53.9	52.4
Bacon.....	do.....	32.7	54.6	60.1	59.4	26.0	46.5	49.0	48.9	28.1	49.8	56.2	55.3
Ham.....	do.....	32.0	54.0	62.3	61.9	30.0	52.5	62.3	62.0	35.7	56.2	63.8	62.8
Lamb.....	do.....	19.8	33.1	40.4	38.7	17.8	30.0	32.9	32.5	18.7	31.6	38.2	37.3
Hens.....	do.....	18.4	33.1	45.1	36.9	22.7	38.3	47.3	44.3	20.9	39.2	48.1	44.4
Salmon (canned).....	do.....		34.9	39.3	38.6		34.3	36.8	36.8		35.0	39.3	39.0
Milk, fresh.....	Quart....	8.0	15.0	16.0	16.0	8.0	14.0	15.0	15.0	8.0	15.7	16.0	16.0
Milk, evaporated.....	15-16 oz. can.		15.3	15.0	14.2		15.5	15.1	14.6		16.8	16.6	15.5
Butter.....	Pound....	35.4	67.8	63.4	63.3	37.8	72.1	67.1	69.0	39.2	73.8	68.4	70.0
Oleomargarine.....	do.....		40.4	37.3	37.0		41.1	38.3	38.1		43.7	43.0	42.6
Nut margarine.....	do.....		33.4	33.0	32.7		34.3	34.0	34.2		35.3	34.8	34.8
Cheese.....	do.....	25.7	44.4	41.7	41.3	21.0	41.7	42.4	42.5	24.0	42.4	41.1	40.9
Lard.....	do.....	15.0	34.6	27.0	27.6	14.2	32.1	25.5	27.8	16.4	36.2	29.6	30.3
Crisco.....	do.....		35.5	31.9	31.1		34.5	32.6	31.0		38.4	33.8	32.9
Eggs, strictly fresh.....	Dozen....	33.3	65.6	64.9	71.5	32.6	63.0	63.5	71.3	42.7	75.8	72.7	79.5
Eggs, storage.....	do.....		56.1		60.6		55.5		62.3		61.5		63.2
Bread.....	Pound....	6.1	10.7	12.4	12.4	4.8	9.9	11.5	11.5	5.6	9.7	11.8	11.8
Flour.....	do.....	2.9	7.1	7.6	7.0	3.3	7.1	8.3	7.8	3.1	7.4	8.3	8.0
Corn meal.....	do.....	2.8	6.7	7.1	6.6	2.8	6.0	5.8	5.2	3.0	6.5	6.6	6.5
Rolled oats.....	do.....		7.0	10.9	10.3		8.1	11.4	11.6		9.4	12.3	12.0
Corn flakes.....	8-oz. pkg..		12.8	13.9	13.7		13.8	14.3	14.2		14.2	15.0	15.3
Cream of Wheat.....	28-oz. pkg.		24.1	29.0	28.9		24.8	30.2	30.2		24.4	32.0	30.5
Macaroni.....	Pound....		17.8	20.5	20.7		16.6	19.1	19.9		18.7	23.2	24.4
Rice.....	do.....	9.0	16.6	16.8	15.8	8.8	17.4	17.1	15.9	9.0	18.0	19.1	17.5
Beans, navy.....	do.....		11.8	11.6	13.7		10.9	10.6	9.9		11.9	11.3	10.3
Potatoes.....	do.....	1.7	3.4	3.8	3.0	1.8	4.3	4.8	3.8	1.9	4.1	4.1	4.1
Onions.....	do.....		5.9	4.7	4.0		5.8	5.1	2.4		5.6	5.3	4.8
Cabbage.....	do.....		4.5	3.0	2.6		4.6	3.6	3.8		4.7	3.9	3.3
Beans, baked.....	No. 2 can..		16.6	16.6	16.3		15.2	15.6	15.5		16.3	16.2	16.0
Corn, canned.....	do.....		17.6	17.7	17.4		17.2	18.0	18.0		18.9	20.4	20.1
Peas, canned.....	do.....		17.5	17.4	17.2		17.6	17.8	18.0		18.6	21.3	20.6
Tomatoes, canned.....	do.....		15.5	15.0	14.4		15.1	14.9	14.6		16.2	15.7	14.1
Sugar, granulated.....	Pound....	5.2	12.4	15.8	12.4	5.4	11.4	18.5	12.5	5.5	11.0	18.5	13.6
Tea.....	do.....	55.0	63.7	73.1	72.0	60.0	77.3	76.6	76.6	50.0	73.8	76.9	76.1
Coffee.....	do.....	30.7	44.4	43.3	39.7	25.6	42.4	40.1	35.9	26.5	40.3	50.5	46.6
Prunes.....	do.....		28.9	29.2	28.6		26.2	31.8	30.9		29.4	28.9	29.2
Raisins.....	do.....		20.2	29.7	30.3		20.2	33.8	35.2		22.1	31.7	31.5
Bananas.....	Dozen....		35.6	44.0	43.4		36.4	50.8	49.6		46.0	53.5	54.7
Oranges.....	do.....		52.8	69.0	70.5		46.6	66.8	65.2		57.8	69.8	71.0

* The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in this report, but in this city it is called "rump" steak.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Columbus, Ohio.			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Oct. 15, 1919	Sept. 15, 1920	Oct. 15, 1920	Oct. 15—		Sept. 15, 1920	Oct. 15, 1920	Oct. 15—		Sept. 15, 1920	Oct. 15, 1920	Oct. 15—		Sept. 15, 1920	Oct. 15, 1920	Oct. 15—		Sept. 15, 1920	Oct. 15, 1920
			1913	1919			1913	1919			1913	1919			1913	1919		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
36.4	42.2	40.4	23.3	34.2	39.6	39.3	23.9	33.3	40.0	36.7	25.4	37.8	46.3	43.5	35.3	59.8	73.1	69.3
34.4	38.9	36.6	21.3	32.9	37.5	37.5	21.4	30.1	35.6	32.5	20.8	32.5	40.4	37.6	28.0	48.0	58.6	54.8
30.0	32.2	31.6	20.1	29.8	32.5	32.1	17.8	26.4	29.5	27.0	20.0	29.5	35.2	32.9	23.3	33.9	38.5	36.5
25.8	27.9	26.2	16.9	24.2	27.3	27.5	15.8	21.0	23.8	21.2	15.4	22.7	26.5	24.7	18.0	26.3	30.4	28.2
18.5	19.7	19.0	13.6	21.8	22.4	21.6	10.0	14.1	15.3	14.0	11.0	16.6	18.7	17.8				
38.0	45.1	44.3	22.5	42.3	45.9	48.8	20.8	45.3	48.9	50.0	21.6	45.1	51.7	50.6	23.2	46.5	49.7	52.0
49.2	51.7	51.4	38.3	56.9	57.9	58.2	28.0	54.8	58.8	58.3	23.5	49.2	54.7	53.0	25.7	49.8	52.9	51.9
54.2	60.3	61.7	32.5	55.0	63.5	61.8	31.7	57.2	65.4	64.3	27.0	56.6	65.2	64.1	31.2	54.3	63.6	63.9
27.5	29.3	28.2	23.3	37.0	46.3	44.3	14.6	27.8	35.7	32.5	16.4	34.4	39.4	38.5	18.3	33.9	39.9	39.7
37.7	38.0	39.4	19.3	35.0	38.9	39.1	19.4	36.7	41.9	40.0	19.8	39.3	48.3	42.3	24.6	46.7	53.6	53.7
34.3	36.7	36.4		35.5	37.9	37.9		35.6	40.6	40.7		34.6	39.5	39.5		33.4	39.0	38.5
14.0	15.0	15.0	11.6	19.0	19.7	20.0	8.4	12.8	12.8	12.8	9.0	16.0	16.0	16.0	9.0	15.0	17.0	17.0
16.7	15.0	14.9		17.2	16.4	15.8		16.4	14.8	14.7		16.1	15.8	15.4		16.2	16.6	16.7
73.1	67.2	68.9	42.5	68.8	65.8	66.1	39.0	71.0	64.4	63.9	37.0	71.5	68.4	69.7	35.9	66.0	67.2	67.6
42.4	40.3	40.1		37.5	37.3	36.3		42.2	43.1	43.1		41.4	42.6	42.1		40.1	42.1	42.3
35.0	34.9	34.9		36.9	37.4	36.9		35.6	35.8	35.5		34.9	34.7	34.5		36.3	37.1	37.2
42.2	40.0	39.6	20.0	42.8	40.2	40.2	26.1	44.9	43.5	43.6	21.7	42.0	40.7	40.5	23.6	42.9	41.2	41.0
33.7	25.6	26.3	16.8	34.9	29.0	32.4	16.1	37.9	29.9	31.2	16.5	35.5	28.4	29.7	15.3	35.3	26.8	28.0
36.2	32.3	31.4		36.1	30.6	30.1		35.5	34.1	31.7		36.6	31.2	30.5		37.3	34.4	34.5
64.2	61.2	74.3		57.5	62.0	65.8	37.1	64.0	67.0	71.9	35.6	70.7	72.9	80.5	52.7	91.6	92.6	103.3
56.2		69.7				60.0		55.0		63.5		57.4		63.8		60.9		64.4
9.8	12.1	12.1	5.3	10.0	12.0	12.0	5.5	11.2	12.2	12.1	5.6	10.2	12.1	12.1	6.2	10.9	12.0	12.0
6.9	8.1	7.5	3.2	7.3	8.0	7.8	2.6	6.1	6.7	6.3	3.1	7.2	8.2	7.5	3.3	7.7	8.8	8.5
6.3	6.5	5.4	3.3	6.3	6.5	6.2	2.6	6.1	6.3	5.7	2.8	6.9	7.3	7.2	3.7	8.4	8.8	8.7
9.4	12.1	12.8		10.8	13.3	14.1		8.7	11.3	11.1		8.6	11.8	12.4		9.8	11.9	12.1
14.3	14.7	14.3		13.9	14.8	14.7		14.7	15.1	15.1		14.1	14.4	14.3		14.5	15.1	15.0
25.0	29.8	29.8		26.4	32.2	31.3		25.0	30.3	30.3		25.0	29.8	29.7		25.1	29.8	29.5
18.6	23.5	21.4		20.0	22.3	22.5		19.6	20.6	20.7		18.9	21.4	20.6		22.6	26.3	25.8
17.5	17.6	16.7	9.3	18.8	19.5	16.0	8.6	17.1	18.0	16.3	8.4	18.1	17.8	16.1	10.0	17.2	18.2	17.0
11.6	10.4	9.5		13.4	11.8	11.4		13.2	13.1	12.2		11.8	10.5	9.6		12.0	11.5	11.0
4.4	4.0	3.3	2.5	5.0	5.2	4.2	1.4	3.4	3.4	3.0	1.6	3.3	3.2	2.7	1.8	3.6	3.6	3.2
6.8	5.6	5.2		6.2	6.8	6.5		6.4	4.9	4.2		6.2	5.0	4.2		7.1	5.6	5.0
5.7	2.8	3.8		5.8	6.3	6.4		2.7	2.2	2.1		4.1	2.7	2.7		4.4	2.9	3.2
16.7	16.3	15.9		18.6	19.0	18.9		17.6	17.9	18.1		16.0	15.8	15.5		16.5	16.8	17.0
16.4	15.9	15.5		20.0	20.9	20.9		18.1	18.6	18.2		19.8	20.0	19.6		20.0	19.5	19.3
16.4	16.8	16.5		20.3	24.0	23.6		19.2	19.5	18.9		18.0	19.0	19.1		20.9	20.0	19.9
15.7	14.6	13.6		15.1	15.4	15.0		15.2	15.2	15.1		16.6	15.1	14.3		16.1	15.3	14.9
11.1	17.4	13.7	5.8	11.9	18.5	14.0	5.4	12.4	15.7	14.2	5.4	11.1	17.5	12.8	5.8	11.0	19.5	14.3
82.1	87.6	87.6	66.7	85.4	89.2	88.6	52.8	70.5	74.5	74.3	43.3	63.6	68.4	68.9	44.2	59.0	60.0	60.3
50.5	44.8	42.3	36.7	53.3	51.8	47.7	29.4	49.2	48.9	44.6	29.3	49.2	46.6	42.7	33.0	49.2	51.6	50.3
24.5	30.9	30.3		31.3	27.8	28.7		28.3	29.9	29.5		31.0	29.1	28.9		25.1	26.7	26.2
21.8	30.3	30.5		21.3	28.4	32.6		21.0	29.6	30.4		21.1	28.9	30.9		22.3	26.4	28.6
39.1	52.7	50.7		39.3	46.7	45.0		43.2	55.6	54.3		31.7	42.3	41.8		39.8	47.4	47.0
51.5	65.4	64.0		50.5	63.2	66.3		50.1	65.7	70.3		52.5	65.5	70.8		52.6	70.6	62.1

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Oct.	Sept.	Oct.	Oct. 15.		Sept.	Oct.	Oct. 15.		Sept.	Oct.
		15, 1919	15, 1920	15, 1920	1913	1919	1920	1920	1913	1919	1920	1920
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	32.5	36.7	36.7	26.0	33.7	43.1	39.6	25.5	37.9	40.6	39.3
Round steak.....	do.....	32.5	35.3	35.3	24.7	33.4	42.3	39.4	21.0	35.5	38.1	36.6
Rib roast.....	do.....	25.8	30.4	30.1	17.8	25.3	30.4	29.0	21.3	27.7	30.2	29.9
Chuck roast.....	do.....	22.4	26.8	27.0	16.3	22.6	27.0	25.8	14.6	23.0	24.2	23.4
Plate beef.....	do.....	18.3	20.9	21.2	12.9	16.7	18.8	18.3	11.6	16.0	16.7	16.0
Perk chops.....	do.....	41.0	45.4	50.4	22.2	40.5	48.2	47.9	24.0	42.7	45.4	49.6
Bacon.....	do.....	64.1	63.0	63.0	29.7	51.1	54.6	53.7	31.0	55.5	53.1	53.7
Ham.....	do.....	50.0	57.5	58.8	31.2	54.7	63.0	62.1	30.2	52.7	58.9	57.5
Lamb.....	do.....	38.3	40.8	40.8	20.7	37.5	36.6	37.0	21.6	34.0	36.7	35.0
Hens.....	do.....	38.3	42.5	43.3	21.0	36.0	41.1	39.3	23.8	43.2	43.8	45.0
Salmon (canned).....	do.....	32.8	36.5	37.2	.....	28.2	32.5	32.1	.....	34.4	33.7	33.4
Milk, fresh.....	Quart.....	19.8	19.7	20.5	8.0	13.7	14.0	14.0	12.3	20.0	25.0	25.0
Milk, evaporated.....	15-16 oz. can.....	16.8	16.2	15.8	.....	16.9	16.3	15.5	.....	16.6	15.2	15.3
Butter.....	Pound.....	68.9	61.7	63.8	36.8	71.5	66.5	67.4	39.3	72.9	70.2	69.9
Oleomargarine.....	do.....	43.1	42.9	41.5	.....	44.3	41.2	40.8	.....	43.3	42.9	41.6
Nut margarine.....	do.....	37.3	37.5	37.4	.....	35.2	35.2	34.8	.....	38.3	38.8	38.5
Cheese.....	do.....	39.1	38.3	38.9	21.3	42.3	40.3	40.7	22.5	40.6	38.7	38.6
Lard.....	do.....	34.2	27.8	28.7	15.0	33.4	26.3	27.5	15.8	35.5	28.8	30.9
Crisco.....	do.....	33.7	32.1	29.5	.....	37.3	31.7	31.3	.....	37.4	32.8	31.8
Eggs, strictly fresh.....	Dozen.....	57.2	62.8	69.1	32.2	65.6	63.4	68.4	40.0	68.8	71.3	73.2
Eggs, storage.....	do.....	52.5	.....	63.5	.....	57.8	.....	57.5	.....	57.0	.....	66.3
Bread.....	Pound.....	9.2	10.3	10.3	5.1	9.7	11.6	11.6	6.2	10.0	12.3	12.2
Flour.....	do.....	7.3	8.5	8.3	3.2	7.2	8.0	7.5	3.7	7.7	8.9	8.6
Corn meal.....	do.....	5.9	5.9	5.4	2.5	6.1	6.4	6.0	2.9	5.7	5.8	5.1
Rollod oats.....	do.....	9.8	12.9	13.0	.....	9.4	12.5	11.8	.....	10.9	12.5	12.8
Corn flakes.....	8-oz. pkg.....	14.5	14.6	14.6	.....	14.8	15.1	15.1	.....	15.1	15.3	15.2
Cream of Wheat.....	28-oz. pkg.....	24.8	29.9	30.2	.....	25.6	32.2	32.1	.....	25.0	31.1	31.1
Macaroni.....	Pound.....	19.3	21.0	21.5	.....	20.7	22.7	22.9	.....	20.9	22.9	22.9
Rice.....	do.....	15.9	14.4	13.5	9.2	19.5	19.0	18.1	6.6	16.2	14.8	13.1
Beans, navy.....	do.....	12.6	11.3	11.0	.....	12.1	10.5	9.3	.....	14.2	13.3	12.6
Potatoes.....	do.....	4.4	5.3	4.8	1.7	3.7	4.3	3.2	2.5	4.8	4.6	4.1
Onions.....	do.....	6.3	6.0	5.8	.....	7.1	5.9	4.0	.....	7.7	6.7	6.1
Cabbage.....	do.....	5.5	5.1	5.5	.....	4.8	3.9	3.9	.....	6.5	5.8	4.9
Beans, baked.....	No. 2 can.....	18.2	16.7	16.7	.....	18.1	16.5	16.2	.....	17.8	16.8	16.0
Corn, canned.....	do.....	17.9	16.3	15.2	.....	18.0	17.1	16.8	.....	20.2	19.9	20.2
Peas, canned.....	do.....	19.6	20.7	20.3	.....	17.1	16.8	16.4	.....	22.1	22.2	22.2
Tomatoes, canned.....	do.....	14.4	14.8	14.3	.....	16.2	15.1	14.6	.....	15.4	14.8	13.4
Sugar, granulated.....	Pound.....	11.3	18.6	14.7	5.7	11.3	17.6	13.7	5.9	11.3	19.1	14.5
Tea.....	do.....	65.4	75.2	75.7	60.0	84.7	88.1	88.1	60.0	86.9	89.7	90.0
Coffee.....	do.....	44.5	40.2	38.2	30.0	51.4	49.4	46.8	34.5	53.7	48.2	44.4
Prunes.....	do.....	28.2	26.1	26.2	.....	30.0	30.0	29.4	.....	33.3	27.6	27.2
Raisins.....	do.....	19.1	28.6	31.9	.....	24.4	33.5	36.1	.....	25.3	31.2	29.7
Bananas.....	Dozen.....	37.1	46.4	45.6	.....	36.6	38.8	34.1	.....	38.3	55.0	46.7
Oranges.....	do.....	49.3	61.9	60.9	.....	49.1	72.3	66.7	.....	45.0	55.0	61.7

^a The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in this report, but in this city it is called "sirloin" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920
		1913	1919			1913	1919			1913	1919		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	24.0	36.5	41.4	38.1	23.6	36.0	44.7	41.6	23.0	32.4	38.4	35.7
Round steak.....	do.....	20.0	34.0	37.4	35.5	21.6	34.0	41.7	38.5	21.3	29.1	33.8	30.8
Rib roast.....	do.....	21.0	29.3	31.8	30.2	18.8	28.9	33.1	31.7	20.0	25.4	30.1	28.0
Chuck roast.....	do.....	15.4	24.2	25.1	22.7	16.4	25.7	28.5	27.4	17.0	20.8	24.1	22.4
Plate beef.....	do.....	11.9	18.8	19.5	17.8	12.1	18.1	18.2	17.4	10.1	13.9	14.4	13.6
Pork chops.....	do.....	20.5	42.4	48.6	46.7	21.2	41.7	49.2	46.0	20.8	40.1	47.0	42.7
Bacon.....	do.....	31.0	55.9	58.6	57.8	28.6	54.0	57.8	57.2	27.7	55.4	57.9	57.9
Ham.....	do.....	29.0	54.1	61.1	58.9	29.0	52.7	58.5	57.4	32.7	54.2	62.1	60.8
Lamb.....	do.....	20.0	37.5	44.5	42.1	19.5	34.0	39.8	38.0	14.8	26.6	32.6	30.0
Hens.....	do.....	19.5	37.2	39.3	40.9	18.8	32.5	42.1	35.6	17.2	30.1	37.7	32.4
Salmon (canned).....	do.....		36.2	40.1	40.5		37.4	44.3	44.1		42.1	47.6	47.5
Milk, fresh.....	Quart.....	10.0	18.0	20.0	20.0	7.0	13.0	13.0	12.0	8.0	13.0	14.0	14.0
Milk, evaporated.....	15-16 oz. can.		17.8	16.6	16.4		16.9	16.3	15.7		17.7	16.6	15.5
Butter.....	Pound.....	38.8	72.7	66.5	67.1	35.0	71.8	64.4	64.6	35.5	66.6	61.6	62.1
Oleomargarine.....	do.....		43.1	42.0	42.0		42.4	38.5	38.1		41.1	41.4	41.2
Nut margarine.....	do.....		42.3	36.7	36.1		34.4	33.8	33.2		33.1	33.2	32.9
Cheese.....	do.....	20.8	41.2	38.1	38.1	22.0	42.0	36.7	37.0	20.8	40.2	38.2	38.1
Lard.....	do.....	16.3	36.3	26.6	29.8	15.8	36.3	28.1	29.3	15.7	35.0	27.5	28.2
Crisco.....	do.....		37.9	34.4	32.2		37.6	33.1	32.9		38.0	32.9	32.4
Eggs, strictly fresh.....	Dozen.....	29.6	63.6	65.3	68.1	35.0	65.1	61.2	67.0	34.0	62.9	61.2	68.1
Eggs, storage.....	do.....		57.5				55.8		60.1		55.0		60.2
Bread.....	Pound.....	6.0	10.0	13.2	13.5	5.7	10.0	10.9	11.0	5.6	9.6	11.1	11.1
Flour.....	do.....	3.5	7.4	8.4	8.3	3.0	7.4	8.1	7.6	2.8	7.2	7.7	7.0
Corn meal.....	do.....	2.5	5.5	5.3	4.8	3.7	6.7	7.1	6.8	2.5	6.3	7.0	6.7
Rolled oats.....	do.....		10.8	12.4	12.7		8.4	9.6	8.9		7.6	10.4	9.3
Corn flakes.....	8-oz. pkg.....		14.3	14.6	14.5		14.2	14.1	14.4		14.5	15.7	15.5
Cream of Wheat.....	28-oz. pkg.....		24.4	29.7	30.1		25.3	30.0	30.0		25.2	31.2	31.4
Macaroni.....	Pound.....		19.2	21.7	20.6		19.0	20.5	20.6		17.2	18.7	19.3
Rice.....	do.....	8.1	16.6	15.4	12.8	9.0	17.6	18.5	17.1	8.6	17.8	19.1	16.0
Beans, navy.....	do.....		13.6	12.8	11.6		11.6	10.8	10.1		11.6	11.7	11.5
Potatoes.....	do.....	2.1	4.6	4.3	3.6	1.6	3.4	3.6	2.9	1.3	3.5	3.1	2.7
Onions.....	do.....		6.9	4.7	4.1		6.2	4.9	3.7		5.9	6.2	5.1
Cabbage.....	do.....		5.3	3.8	3.5		2.8	2.4	2.1		2.8	3.3	4.1
Beans, baked.....	No. 2 can.....		18.7	17.3	17.4		16.3	15.5	15.4		18.7	18.1	18.0
Corn, canned.....	do.....		18.8	18.6	18.9		18.2	17.4	17.1		17.4	17.4	17.4
Peas, canned.....	do.....		18.8	19.3	19.1		17.5	16.9	17.1		17.1	18.2	18.3
Tomatoes, canned.....	do.....		16.2	14.6	12.4		17.0	15.0	14.9		16.3	16.4	16.4
Sugar, granulated.....	Pound.....	5.6	11.5	18.6	14.6	5.5	11.8	16.7	13.1	5.6	12.3	17.7	13.2
Tea.....	do.....	63.8	89.9	96.3	93.5	50.0	68.2	72.2	72.4	45.0	64.5	69.3	70.9
Coffee.....	do.....	27.5	53.5	46.4	41.5	27.5	47.1	43.5	39.4	30.8	53.1	49.8	44.6
Prunes.....	do.....		28.4	27.3	27.3		29.9	28.6	28.5		27.9	29.5	28.6
Raisins.....	do.....		21.3	30.5	33.0		20.8	31.2	31.4		18.4	30.2	30.4
Bananas.....	Dozen.....		40.5	46.4	46.5		40.0	46.7	41.7		41.7	60.0	60.0
Oranges.....	do.....		55.3	73.8	63.6		57.9	70.7	71.4		57.8	70.5	71.8

* Whole.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Mobile, Ala.			Newark, N. J.					New Haven, Conn.					New Orleans, La.					New York, N. Y.				
Oct. 15, 1919	Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920
			1913	1919			1913	1919			1913	1919			1913	1919			1913	1919		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
32.9	35.8	35.5	27.7	44.1	54.4	50.7	31.8	52.6	61.8	59.5	21.5	31.7	34.7	33.1	26.1	42.6	51.0	50.1				
32.3	36.1	35.9	27.7	45.0	54.2	50.4	29.6	47.7	55.5	53.7	19.0	29.2	32.4	31.2	25.5	44.5	51.2	50.3				
30.0	30.3	30.5	21.0	35.9	42.1	39.7	24.2	37.6	44.7	43.7	18.4	28.3	30.8	30.0	21.6	37.2	42.4	41.7				
23.9	26.7	26.0	18.6	27.6	29.7	27.6	20.0	30.9	35.7	33.9	15.5	22.1	22.2	21.9	16.0	27.6	30.5	28.8				
19.8	21.2	20.2	12.0	18.9	18.5	16.2	.....	.....	.....	.....	11.2	18.2	18.4	18.4	14.8	24.4	24.3	22.7				
45.9	55.0	56.9	24.0	47.2	53.3	52.7	23.6	48.1	55.3	54.3	25.0	47.2	52.5	53.7	22.9	45.7	49.9	52.1				
60.0	60.5	60.5	25.8	47.6	47.7	47.4	29.7	54.7	57.0	56.2	30.4	55.5	56.9	57.7	25.7	47.9	52.5	52.0				
54.5	60.3	60.0	20.8	37.6	42.4	42.4	32.8	57.9	70.0	69.1	26.0	49.9	57.5	57.8	29.5	57.0	64.4	63.1				
35.0	36.7	37.8	19.0	36.6	40.5	39.3	18.3	37.8	44.7	41.3	21.0	38.0	43.7	42.1	15.2	29.0	33.0	32.3				
43.8	46.4	48.6	23.0	41.5	47.2	46.9	23.5	46.4	51.5	51.3	21.0	43.5	47.7	46.7	21.8	40.5	46.6	46.5				
33.3	39.4	39.3	.....	35.4	39.2	39.7	.....	36.6	41.7	41.5	.....	36.6	39.6	40.0	.....	39.8	44.0	43.6				
17.5	23.5	23.5	9.0	16.5	18.8	19.0	.....	16.0	17.0	17.0	9.5	18.5	18.5	18.5	9.0	16.0	18.0	18.0				
17.6	18.1	17.6	.....	15.7	15.0	14.6	9.0	16.5	15.5	15.2	.....	16.5	15.4	15.3	.....	15.5	15.1	14.5				
70.9	71.5	72.5	39.2	75.3	68.6	71.5	36.8	66.3	66.8	67.1	37.5	71.5	68.8	71.5	37.5	72.4	67.6	69.9				
44.9	42.8	42.6	.....	42.7	41.1	40.7	.....	42.9	42.6	42.1	.....	43.4	43.4	43.5	.....	41.7	42.2	41.9				
41.8	40.6	41.5	.....	35.7	36.1	35.8	.....	36.4	35.3	36.1	.....	36.1	36.0	35.9	.....	34.5	35.0	34.9				
41.2	40.9	41.1	24.8	43.9	42.4	42.5	23.5	42.7	40.2	40.0	21.4	42.0	39.2	40.6	19.8	42.3	41.8	41.6				
37.2	28.5	29.3	16.3	38.6	27.8	29.3	15.7	35.5	26.6	27.9	14.9	35.9	26.0	27.3	16.3	35.7	28.1	30.1				
36.5	35.6	35.3	.....	36.4	31.0	29.9	.....	35.7	31.4	30.5	.....	39.5	33.3	32.4	.....	36.1	31.0	30.4				
61.4	68.3	70.3	52.7	82.7	80.8	91.0	52.9	84.9	90.3	97.8	34.3	62.3	63.9	66.3	47.9	80.0	79.0	87.4				
58.0	.....	64.0	.....	63.1	.....	68.1	.....	59.1	.....	71.5	.....	57.2	.....	62.7	.....	60.5	.....	66.7				
9.6	11.0	11.0	5.6	9.8	11.5	11.4	6.0	10.6	11.8	11.8	5.0	9.2	10.5	10.7	6.0	10.0	11.9	11.9				
7.1	9.0	8.6	3.6	7.4	8.8	8.1	3.2	7.3	8.5	7.9	3.8	7.5	8.7	8.5	3.2	7.5	9.0	8.3				
6.3	6.0	5.4	3.6	7.5	8.0	8.1	3.2	7.5	8.2	7.9	2.9	5.8	5.5	5.1	3.5	7.3	8.2	8.1				
11.1	13.8	13.3	.....	8.9	10.3	10.4	.....	9.9	11.3	11.2	.....	8.7	11.7	11.9	.....	7.9	9.8	10.0				
14.7	14.9	14.7	.....	12.4	13.2	13.0	.....	13.9	14.0	13.8	.....	14.1	14.4	14.1	.....	12.0	12.8	12.7				
25.5	30.8	30.9	.....	23.9	28.6	28.4	.....	24.4	29.5	29.5	.....	24.8	29.9	30.0	.....	24.1	28.9	28.8				
19.0	21.3	21.6	.....	21.0	25.3	25.3	.....	20.8	23.1	22.5	.....	11.4	11.6	11.6	.....	20.0	24.4	24.2				
16.6	14.5	13.3	9.0	17.1	17.4	15.9	9.3	17.3	17.9	16.9	7.5	14.8	13.4	11.6	8.0	16.4	16.8	15.6				
14.1	13.6	12.2	.....	12.7	11.7	11.0	.....	12.4	11.5	11.0	.....	11.4	10.4	10.2	.....	12.3	12.2	11.2				
4.8	5.5	4.6	2.5	4.5	3.9	3.5	1.7	3.3	3.5	3.2	2.1	5.0	4.9	4.3	2.4	4.1	3.8	3.8				
7.3	5.6	5.1	.....	6.8	5.5	5.4	.....	6.9	5.8	4.9	.....	5.9	4.9	4.6	.....	6.0	5.3	4.8				
5.2	4.4	4.5	.....	4.8	3.6	3.8	.....	3.8	3.5	3.8	.....	5.0	3.3	3.3	.....	3.9	2.7	2.9				
18.5	16.7	16.1	.....	15.0	14.4	14.4	.....	17.7	16.9	16.9	.....	17.6	16.9	16.7	.....	15.4	15.1	15.2				
19.5	19.1	18.5	.....	20.7	18.5	18.5	.....	21.9	21.7	21.3	.....	17.6	16.1	16.2	.....	19.1	18.2	18.1				
18.9	19.7	18.9	.....	19.9	19.1	19.2	.....	21.6	22.8	22.4	.....	18.4	17.3	17.4	.....	18.3	18.5	18.2				
15.8	15.0	14.9	.....	15.2	13.7	12.8	.....	22.6	23.1	22.5	.....	14.9	14.8	14.5	.....	16.2	14.3	12.9				
11.3	19.7	14.8	5.2	10.9	18.3	13.6	5.5	11.1	18.8	14.0	5.1	10.9	17.4	13.9	4.9	10.8	17.3	13.1				
79.2	81.3	81.0	53.8	56.4	54.6	53.5	55.0	61.4	63.7	63.0	62.1	67.1	74.0	74.1	43.3	55.8	58.4	58.4				
46.3	43.6	40.9	29.3	45.8	41.0	36.3	33.8	50.0	49.7	46.7	25.0	42.5	37.8	35.3	27.2	43.9	40.1	37.4				
27.1	29.4	28.6	.....	29.9	27.6	26.6	.....	29.2	27.7	26.9	.....	33.3	27.7	26.4	.....	31.8	27.2	26.2				
19.8	29.7	30.7	.....	19.9	29.5	31.2	.....	20.9	28.9	31.1	.....	19.2	28.5	30.1	.....	19.9	29.9	32.0				
30.5	32.2	33.8	.....	39.1	52.9	51.8	.....	35.8	44.0	43.4	.....	25.0	25.0	25.0	.....	37.2	46.3	47.3				
56.1	71.7	55.0	.....	63.8	78.6	73.9	.....	56.4	70.3	68.4	.....	65.0	48.3	51.0	.....	61.8	77.6	75.7				

* No. 3 can.

TABLE 3.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Oct. 1919	Sept. 1920	Oct. 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15, 1919	Sept. 15, 1920	Oct. 15, 1920
					1913	1919					
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	44.1	51.6	49.9	25.6	36.4	45.6	43.0	33.2	38.6	36.4
Round steak.....	do.....	39.9	46.6	44.1	22.8	32.5	43.1	39.3	31.7	38.3	35.1
Rib roast.....	do.....	36.6	40.3	38.8	19.4	26.0	30.9	30.0	24.8	27.9	26.8
Chuck roast.....	do.....	26.6	29.7	29.0	16.1	22.2	25.7	23.5	21.6	25.0	23.9
Plate beef.....	do.....	18.8	19.0	18.0	11.8	16.2	16.4	14.5	16.0	17.8	15.8
Pork chops.....	do.....	43.0	47.4	49.4	21.9	41.1	50.8	47.8	39.1	45.8	44.9
Bacon.....	do.....	52.6	54.1	54.6	28.6	56.3	59.7	59.2	54.9	55.9	55.6
Ham.....	do.....	48.3	53.3	53.3	30.0	56.5	65.0	64.2	54.9	60.3	60.6
Lamb.....	do.....	38.3	45.0	43.3	16.3	32.0	39.5	38.5	33.6	36.0	35.3
Hens.....	do.....	46.0	47.5	50.0	16.3	33.5	41.0	34.3	34.7	38.5	37.6
Salmon (canned).....	do.....	30.7	34.6	35.2	.....	37.1	40.4	40.4	32.9	37.7	37.5
Milk, fresh.....	Quart.....	21.0	21.3	21.3	8.2	15.2	15.6	15.5	14.3	15.1	15.1
Milk, evaporated.....	15-16 oz. can.....	16.0	15.4	13.1	.....	17.5	17.1	15.9	17.6	16.3	15.7
Butter.....	Pound.....	72.6	72.4	73.4	37.0	70.9	64.4	64.6	69.3	62.7	63.5
Oleomargarine.....	do.....	47.2	43.8	45.8	.....	44.2	44.1	43.0	44.3	40.2	40.2
Nut margarine.....	do.....	39.0	35.5	35.5	.....	35.3	36.9	36.1	35.9	35.5	35.4
Cheese.....	do.....	41.6	39.4	39.1	23.3	42.5	40.7	39.1	43.3	39.1	39.3
Lard.....	do.....	37.8	28.4	29.6	17.6	38.1	31.1	31.7	36.7	28.6	29.1
Crisco.....	do.....	38.3	33.9	32.9	.....	40.0	36.5	35.3	39.5	33.6	32.2
Eggs, strictly fresh.....	Dozen.....	64.3	68.4	73.4	30.0	64.3	60.5	65.6	63.2	59.0	68.1
Eggs, storage.....	do.....	57.3	.....	62.0	.....	56.4	.....	65.5	57.0	.....	63.3
Bread.....	Pound.....	9.9	11.5	11.5	5.2	10.0	12.1	11.6	10.0	12.6	12.6
Flour.....	do.....	7.5	8.4	8.0	2.7	6.8	7.8	7.3	7.7	8.6	8.1
Corn meal.....	do.....	6.0	5.9	5.5	2.5	6.6	6.5	5.8	6.5	6.5	6.0
Roll'd oats.....	do.....	10.3	11.6	11.5	.....	9.0	13.4	13.9	9.5	12.7	13.0
Corn flakes.....	8-oz. pkg.....	14.6	14.6	14.2	.....	14.7	15.2	15.4	14.7	15.3	15.3
Cream of Wheat.....	28-oz. pkg.....	25.5	29.1	28.9	.....	25.6	31.7	31.7	26.6	31.8	31.9
Macaroni.....	Pound.....	19.3	21.8	22.4	.....	19.5	23.0	23.2	19.2	20.9	22.1
Rice.....	do.....	18.1	19.6	18.9	8.5	18.2	19.2	16.4	17.5	19.1	16.8
Beans, navy.....	do.....	13.5	12.0	11.9	.....	13.4	12.2	11.5	12.4	11.1	10.9
Potatoes.....	do.....	4.3	4.3	3.7	1.8	4.2	3.9	2.9	3.6	3.7	3.0
Onions.....	do.....	7.5	5.7	5.4	.....	6.6	5.4	4.4	7.3	6.8	5.1
Cabbage.....	do.....	5.2	4.6	4.7	.....	4.1	2.5	2.9	4.5	4.6	3.8
Beans, baked.....	No. 2 can.....	14.3	14.0	13.9	.....	20.1	19.6	19.6	18.5	17.2	17.5
Corn, canned.....	do.....	20.5	21.4	20.9	.....	17.8	18.0	17.9	17.4	17.2	17.3
Peas, canned.....	do.....	21.7	22.5	22.1	.....	18.4	18.6	18.4	18.6	18.4	18.4
Tomatoes, canned.....	do.....	14.4	14.4	14.1	.....	17.2	16.4	16.1	16.3	15.4	15.3
Sugar, granulated.....	Pound.....	11.3	18.8	13.5	5.8	12.1	17.5	14.2	12.0	18.0	13.7
Tea.....	do.....	83.5	90.4	90.4	56.0	76.6	81.5	79.9	73.4	72.1	72.7
Coffee.....	do.....	52.1	51.8	48.7	30.0	52.2	49.2	43.7	48.9	45.7	43.7
Prunes.....	do.....	28.3	28.2	27.0	.....	29.4	31.8	30.5	30.4	32.4	32.1
Raisins.....	do.....	21.1	27.0	29.1	.....	23.9	31.7	32.2	21.4	29.4	31.1
Bananas.....	Dozen.....	38.9	46.0	44.5	.....	43.8	51.7	46.7	10.5	13.8	14.3
Oranges.....	do.....	53.6	79.6	75.5	.....	55.9	73.8	75.8	52.5	64.6	66.0

⁷ The steak for which prices are here quoted is known as "porterhouse" in most of the cities included in this report, but in this city it is called "sirloin" steak.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.				Portland, Oreg.				Providence, R. I.			
Oct. 15.		Sept 15, 1920	Oct. 15, 1920	Oct. 15.		Sept 15, 1920	Oct. 15, 1920	Oct. 15, 1919	Sept 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	
1913	1919			1913	1919						1913	1919			1913	1919			1913	1919
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
31.2	50.4	59.7	57.0	27.7	45.2	53.5	49.5	56.4	69.3	63.3	23.5	30.5	32.9	32.3	40.2	66.3	79.4	77.8	
26.4	46.8	53.2	49.9	23.7	40.7	48.2	44.5	47.5	57.6	52.5	21.0	29.8	31.2	30.4	31.6	55.0	62.5	60.8	
22.1	38.8	42.2	41.7	21.7	34.2	39.4	38.0	31.1	35.4	31.8	19.6	28.2	29.9	29.3	24.2	41.2	47.1	45.9	
18.2	30.5	32.0	30.2	17.8	28.3	30.3	29.1	24.8	27.9	24.6	16.9	21.2	22.0	21.4	18.8	35.6	36.2	35.7	
11.5	19.4	17.6	17.3	12.8	18.2	18.0	18.0	.....	.....	.....	13.8	15.5	16.7	16.4	.....	.....	.....	.....
23.3	46.2	50.0	50.1	23.2	44.8	53.2	51.0	47.6	51.0	54.5	23.4	44.8	49.3	47.5	22.0	53.3	58.1	58.4	
27.5	53.1	50.3	50.2	30.6	55.8	57.4	56.4	49.9	50.9	51.1	31.5	58.6	60.8	60.2	22.2	50.2	50.4	50.4	
31.9	58.6	67.6	66.0	29.9	59.8	65.8	65.6	53.9	65.8	66.5	30.8	57.5	61.3	60.6	33.3	62.7	70.9	70.5	
19.1	39.4	45.1	43.0	20.0	38.5	44.2	42.6	34.1	41.1	39.2	16.9	31.0	34.6	32.9	18.7	40.9	45.8	45.3	
23.1	44.1	50.6	49.7	25.5	44.6	52.4	49.1	46.2	54.0	52.5	21.3	38.3	39.4	38.9	24.8	48.5	53.1	49.8	
.....	31.4	35.7	35.8	.....	35.7	39.9	40.1	33.3	38.7	38.8	.....	39.5	47.6	48.2	.....	39.8	42.3	43.0
8.0	14.0	15.0	15.0	8.8	16.0	16.0	16.0	14.5	17.0	17.0	9.7	15.9	15.4	15.8	9.0	16.5	18.0	18.1	
.....	15.8	15.8	15.1	.....	16.3	15.5	15.1	17.3	16.5	16.1	.....	17.1	15.0	14.5	.....	17.2	16.1	16.0
43.1	77.2	74.6	75.8	39.5	74.5	69.3	70.8	71.3	73.4	73.3	42.0	74.1	73.8	66.2	38.6	67.9	69.2	68.8	
.....	44.5	44.4	44.2	.....	42.2	39.4	38.8	44.0	43.9	43.3	.....	43.1	42.0	42.0	.....	41.0	41.1	41.6
.....	38.3	36.8	36.8	.....	35.5	35.5	35.3	35.9	35.6	35.4	.....	38.5	38.2	38.0	.....	34.6	35.4	35.5
25.0	44.9	41.9	41.9	24.5	43.2	42.0	41.1	44.4	42.3	41.6	20.8	42.9	42.9	42.1	22.0	42.2	40.7	40.5	
15.6	35.2	26.9	29.0	15.7	36.3	27.3	28.6	36.2	26.4	28.3	18.3	40.9	32.3	33.7	15.7	36.4	27.2	27.5	
.....	34.8	30.8	29.5	.....	37.3	31.7	30.4	38.3	33.4	32.6	.....	41.9	37.1	35.7	.....	37.4	33.0	31.4
42.5	75.5	72.2	80.4	38.0	70.2	67.6	75.9	81.8	84.3	95.0	49.0	74.6	68.2	77.9	53.0	87.7	87.1	100.7	
.....	61.2	.....	62.2	.....	59.3	.....	63.6	60.9	.....	69.0	.....	64.2	.....	63.6	.....	61.4	.....	67.3
4.8	9.4	10.6	10.6	5.5	10.3	11.8	11.8	11.0	12.0	12.0	5.6	9.9	11.3	11.3	5.9	10.6	12.3	12.3	
3.2	7.4	8.4	7.9	3.2	7.5	8.2	7.8	7.4	8.5	7.9	2.9	6.5	7.5	7.1	3.5	7.9	8.8	8.2	
2.8	6.3	6.1	5.9	3.0	7.6	7.9	7.5	7.0	7.3	7.1	3.4	7.7	7.4	7.4	3.1	6.6	6.8	6.6	
.....	8.3	10.4	10.3	.....	9.4	11.6	11.6	8.4	9.6	10.0	.....	9.0	12.7	12.2	.....	8.9	12.2	12.3
.....	12.4	12.8	12.8	.....	13.9	14.0	14.0	14.3	15.2	15.1	.....	14.5	14.6	14.5	.....	14.1	14.4	14.1
.....	24.4	28.7	28.5	.....	25.2	29.6	29.8	25.0	29.8	29.9	.....	27.9	34.1	33.8	.....	24.8	30.6	30.6
.....	20.7	22.3	22.8	.....	18.8	22.7	22.5	22.7	24.7	24.8	.....	18.0	18.5	18.7	.....	21.7	25.2	25.0
9.8	17.4	18.0	16.9	9.2	18.0	18.8	17.8	15.7	18.8	18.3	8.6	17.1	18.5	17.1	9.3	17.4	17.8	17.4	
.....	12.0	11.1	10.8	.....	12.3	11.4	10.0	12.0	11.1	10.9	.....	11.9	9.7	9.4	.....	11.9	11.1	10.1
2.3	4.4	3.9	3.5	1.9	3.9	3.6	3.3	2.9	3.4	2.8	1.3	3.1	3.1	2.8	1.7	3.6	3.4	3.1	
.....	6.0	4.7	4.2	.....	5.9	5.6	5.0	6.0	5.2	4.4	.....	4.9	4.4	4.2	.....	6.2	5.0	4.5
.....	5.7	3.1	3.4	.....	4.9	4.3	3.9	2.3	2.3	2.3	.....	3.7	3.6	3.0	.....	3.8	3.5	4.0
.....	14.2	5.1	5.1	.....	16.6	16.7	16.5	19.3	19.1	18.5	.....	22.0	21.0	21.0	.....	16.8	16.5	16.4
.....	18.3	17.9	17.5	.....	18.9	18.2	17.8	21.0	19.6	19.7	.....	22.5	22.2	22.4	.....	20.2	20.6	20.8
.....	18.4	18.0	17.9	.....	18.5	18.5	17.8	20.7	21.1	20.5	.....	22.3	21.0	21.2	.....	20.2	21.5	21.6
.....	16.0	14.4	14.8	.....	15.8	14.4	14.1	19.5	17.2	17.8	.....	18.1	14.3	13.9	.....	16.8	15.5	15.1
5.0	10.7	17.1	13.6	5.7	11.1	19.9	13.7	10.9	19.8	14.3	6.2	11.0	19.1	13.8	5.1	11.0	20.2	15.0	
54.0	61.0	61.9	61.2	58.0	80.7	80.0	78.7	63.5	63.7	63.2	55.0	63.2	68.9	68.3	48.3	59.9	60.1	59.9	
24.5	45.0	39.6	33.9	30.0	49.2	48.0	44.6	50.6	50.3	47.5	35.0	50.7	47.6	44.7	30.0	52.2	50.5	47.7	
.....	31.8	26.4	26.0	.....	29.7	30.2	29.3	27.6	26.0	25.4	.....	23.9	24.8	22.4	.....	30.5	28.2	28.0
.....	20.1	28.5	31.2	.....	22.0	32.2	33.9	20.6	29.2	30.1	.....	18.8	29.2	30.0	.....	21.4	28.4	30.0
.....	37.9	41.8	41.5	.....	46.8	51.6	49.7	37.1	60.0	65.0	.....	43.8	55.0	56.0	.....	39.3	48.6	51.9
.....	55.9	71.3	69.3	.....	52.4	69.0	75.3	61.5	86.6	84.8	.....	59.6	79.7	82.5	.....	66.2	79.6	77.8

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Richmond, Va.				Rochester, N. Y.			St. Louis, Mo.			
		Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15, 1919	Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920
		1913	1919						1913	1919		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	22.2	42.2	46.7	46.1	38.8	45.2	43.6	26.0	34.5	42.0	40.8
Round steak.....	do.....	20.0	38.9	42.8	42.2	36.3	41.5	39.9	24.3	34.4	41.8	39.7
Rib roast.....	do.....	18.9	34.7	34.5	34.2	30.9	38.8	33.0	19.5	29.5	32.9	31.8
Chuck roast.....	do.....	15.9	28.8	28.4	28.2	27.8	29.8	28.8	15.6	21.3	24.2	22.8
Plate beef.....	do.....	12.6	23.2	22.1	22.5	18.9	19.5	18.9	11.9	17.7	18.4	18.4
Pork chops.....	do.....	22.0	44.4	47.8	48.9	44.8	48.5	49.4	19.8	39.7	46.3	44.8
Bacon.....	do.....	27.2	51.3	49.3	50.0	43.6	46.9	45.4	26.9	49.4	51.5	50.9
Ham.....	do.....	25.0	50.3	55.5	55.5	50.9	58.9	58.2	27.3	54.0	60.7	59.4
Lamb.....	do.....	19.3	40.4	45.0	44.4	32.0	37.1	36.8	18.3	31.1	36.1	33.8
Hens.....	do.....	20.4	45.0	44.7	46.0	43.4	48.2	47.5	16.8	32.8	38.9	34.6
Salmon (canned).....	do.....		27.2	26.9	26.6	33.7	40.1	40.2	....	33.4	36.9	36.4
Milk, fresh.....	Quart.....	10.0	15.7	16.5	16.5	14.0	15.5	15.5	8.8	16.0	16.0	16.8
Milk, evaporated.....	15-16 oz. can.....		17.1	16.4	16.5	16.8	16.5	15.9	....	15.8	14.6	14.0
Butter.....	Pound.....	40.2	73.6	75.6	75.1	69.4	67.8	68.6	37.9	72.1	67.4	69.8
Oleomargarine.....	do.....		43.9	44.5	44.5	43.1	43.0	42.8	....	39.9	39.1	38.5
Nut margarine.....	do.....		36.8	37.8	37.8	34.3	35.3	35.1	....	35.5	34.6	34.3
Cheese.....	do.....	22.3	43.5	39.9	40.5	41.2	40.4	39.6	19.5	40.7	38.3	38.3
Lard.....	do.....	15.4	36.4	28.4	29.7	35.8	26.8	27.6	13.1	32.2	23.4	24.4
Crisco.....	do.....		38.6	33.4	32.8	36.1	31.7	31.0	....	35.8	31.2	30.7
Eggs, strictly fresh.....	Dozen.....	34.5	64.0	68.1	78.4	74.2	71.5	83.0	31.0	60.3	63.3	69.2
Eggs, storage.....	do.....		60.2	....	66.5	58.5	....	63.5	....	54.0	....	59.4
Bread.....	Pound.....	5.4	10.6	13.2	13.1	10.0	11.6	11.4	5.6	10.0	12.1	12.1
Flour.....	do.....	3.2	7.6	8.5	8.1	7.4	8.4	7.9	2.9	6.8	7.6	7.1
Corn meal.....	do.....	2.3	6.3	6.8	6.2	6.9	7.6	7.3	2.5	5.7	6.2	5.1
Rolled oats.....	do.....		10.8	11.9	12.2	7.1	9.1	8.7	....	6.5	10.5	10.5
Corn flakes.....	8-oz. pkg.....		14.8	14.8	14.6	13.6	14.5	14.6	....	13.4	13.3	12.9
Cream of Wheat.....	28-oz. pkg.....		25.7	30.9	30.9	24.5	30.0	30.1	....	24.3	30.3	30.2
Macaroni.....	Pound.....		18.5	21.5	21.5	20.5	22.5	21.9	....	18.4	20.2	20.1
Rice.....	do.....	10.0	17.8	19.9	18.9	17.8	18.2	17.3	8.2	16.9	16.0	14.4
Beans, navy.....	do.....		14.0	13.2	12.0	12.1	11.8	11.1	....	11.9	10.6	9.4
Potatoes.....	do.....	2.1	4.8	4.8	4.5	2.7	3.2	2.4	1.9	3.7	4.8	3.8
Onions.....	do.....		6.5	6.2	5.6	6.2	4.6	4.4	....	6.1	5.0	4.5
Cabbage.....	do.....		5.7	4.3	4.2	3.5	3.4	2.7	....	4.3	3.7	3.8
Beans, baked.....	No. 2 can.....		14.7	14.4	13.9	14.8	14.4	14.3	....	15.1	15.2	14.9
Corn, canned.....	do.....		19.2	20.1	19.9	19.5	19.5	19.8	....	16.5	16.3	15.5
Peas, canned.....	do.....		22.1	21.4	21.4	19.1	20.5	20.6	....	15.9	16.0	15.8
Tomatoes, canned.....	do.....		16.9	14.7	14.4	16.3	15.9	15.7	....	14.5	14.5	13.9
Sugar, granulated.....	Pound.....	5.4	11.2	18.4	14.8	10.9	18.2	14.0	5.3	12.8	16.6	12.5
Tea.....	do.....	56.0	81.9	89.2	89.6	61.0	68.7	68.1	55.0	73.1	74.9	74.0
Coffee.....	do.....	27.4	47.1	48.0	44.2	45.1	45.4	40.5	24.4	45.7	41.7	38.2
Prunes.....	do.....		31.7	28.0	28.6	27.4	28.2	27.7	....	30.2	28.8	29.3
Raisins.....	do.....		20.1	28.3	31.7	19.4	29.8	31.1	....	21.3	29.6	31.5
Bananas.....	Dozen.....		44.7	54.1	52.4	40.3	49.0	48.5	....	32.9	39.7	39.4
Oranges.....	do.....		55.4	68.0	75.0	57.6	67.7	73.3	....	49.9	65.2	64.3

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

St. Paul, Minn.				Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.		Scranton, Pa.			
Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920	Sept. 15, 1920	Oct. 15, 1920	Oct. 15.		Sept. 15, 1920	Oct. 15, 1920
1913	1919			1913	1919			1913	1919					1913	1919		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
26.4	33.4	42.1	39.2	22.6	33.2	34.2	33.7	21.4	29.5	31.9	32.1	40.9	39.6	26.0	44.1	54.5	52.3
23.0	29.3	35.4	32.4	20.0	29.6	31.7	31.7	19.7	28.5	30.5	30.2	36.8	35.4	22.0	38.8	47.1	44.9
20.4	27.1	33.6	30.7	19.4	25.4	27.4	27.0	21.3	28.6	30.9	30.8	30.9	30.2	23.0	34.9	40.8	38.9
16.8	22.3	25.7	23.6	15.0	21.3	23.0	23.1	15.2	20.4	21.5	21.0	24.5	23.8	17.6	28.9	33.5	31.7
10.8	14.4	15.0	14.5	12.5	15.8	15.8	15.8	14.2	16.9	17.9	17.7	19.5	18.4	11.9	18.8	19.7	18.7
20.4	38.4	47.4	42.8	24.3	43.5	46.5	50.0	24.2	43.0	47.0	46.4	46.0	48.3	22.8	48.1	51.3	52.7
27.0	48.6	57.1	54.7	30.0	53.7	56.2	36.5	34.4	59.2	64.3	64.8	54.2	53.5	27.5	57.0	57.2	56.2
28.8	52.1	60.8	58.8	30.0	55.8	57.5	58.7	34.0	57.5	62.3	62.3	57.3	56.7	30.0	55.0	66.9	64.5
16.1	25.7	34.7	31.0	16.9	27.3	32.9	31.3	16.7	32.4	35.7	35.2	43.3	45.0	17.3	41.6	48.9	46.3
18.0	30.3	38.4	33.3	23.3	34.4	39.2	41.7	24.5	47.3	50.4	49.8	48.8	50.0	21.8	46.6	51.8	51.8
.....	36.8	41.7	41.7	.....	38.8	40.0	40.0	.....	31.6	34.6	34.6	43.8	43.8	.....	37.4	42.5	42.7
7.8	13.0	14.0	14.0	8.7	12.5	12.5	12.5	10.0	14.2	16.8	16.8	24.7	24.7	8.8	14.0	16.0	16.0
.....	17.4	15.8	15.6	.....	17.0	14.9	14.9	.....	15.1	14.2	13.2	15.0	15.0	.....	15.8	15.4	15.1
36.5	66.9	62.2	62.4	39.0	70.3	70.0	69.5	40.0	73.5	77.1	69.6	71.8	72.1	36.6	66.2	66.7	68.0
.....	40.5	42.6	42.5	.....	42.8	41.0	40.3	.....	37.9	38.8	38.7	44.8	44.7	.....	43.4	43.3	43.1
.....	34.6	35.1	34.8	.....	38.4	37.6	37.7	.....	35.4	35.4	35.4	39.0	38.6	.....	36.9	36.8	36.7
21.0	40.8	39.2	39.6	24.2	42.9	38.5	38.7	21.0	44.7	42.9	43.2	40.3	40.5	18.3	41.5	39.7	39.4
15.3	35.5	28.5	29.4	20.0	39.7	29.6	31.7	18.0	37.4	31.2	32.0	30.0	31.0	16.0	37.1	28.2	29.6
.....	41.0	37.9	36.2	.....	38.2	36.1	36.1	.....	38.5	33.2	32.4	33.9	33.0	.....	37.5	33.4	32.3
32.3	62.4	61.7	67.8	42.0	70.4	70.4	78.4	56.4	79.1	76.6	90.6	65.7	69.4	45.8	72.6	69.5	80.4
.....	56.9	.....	60.5	.....	58.9	.....	67.9	.....	60.7	.....	62.0	.....	61.7	.....	59.9	.....	63.7
6.0	9.2	11.4	11.4	5.9	10.0	12.6	12.4	5.9	10.0	10.9	10.9	12.7	12.4	5.6	10.0	13.9	13.9
2.9	7.3	8.1	7.2	2.4	6.1	6.3	5.9	3.4	7.1	8.3	7.8	8.7	8.3	3.6	7.8	9.1	8.6
2.5	6.6	7.5	6.9	3.4	7.3	7.4	7.1	3.5	7.1	7.5	7.4	5.2	5.0	.....	9.0	8.4	8.2
.....	8.0	10.6	10.2	.....	9.3	10.8	10.6	.....	8.6	11.3	11.2	11.9	13.0	.....	10.5	11.9	12.2
.....	14.5	15.6	15.3	.....	14.8	15.6	15.2	.....	14.2	15.0	14.6	14.8	14.9	.....	14.2	14.5	14.4
.....	25.5	31.5	31.2	.....	26.4	33.6	34.0	.....	24.7	28.9	29.1	31.7	31.4	.....	25.4	29.7	29.6
.....	19.4	21.1	20.3	.....	19.8	22.5	22.7	.....	13.3	14.5	14.3	24.1	22.9	.....	21.6	25.6	25.9
10.0	18.6	19.2	17.0	8.2	17.7	17.3	15.0	8.5	15.3	16.3	15.3	14.5	13.8	8.5	18.0	18.2	17.3
.....	11.9	11.8	11.3	.....	13.0	11.9	10.7	.....	10.3	9.2	8.7	13.7	14.3	.....	15.2	13.5	12.7
1.3	3.2	3.2	2.6	1.4	3.1	2.8	2.6	1.8	3.3	4.2	3.6	4.7	4.1	1.9	3.4	3.4	3.0
.....	6.2	5.2	3.9	.....	4.6	4.4	3.4	.....	4.4	3.3	2.8	7.1	5.8	.....	6.7	5.7	5.2
.....	2.5	3.4	2.9	.....	4.6	3.9	3.1	.....	.....	.....	.....	5.1	5.0	.....	2.5	2.7	2.6
.....	18.9	19.7	19.0	.....	19.4	20.0	20.0	.....	18.4	18.4	18.4	18.0	17.6	.....	16.5	15.6	15.4
.....	17.5	18.4	17.7	.....	18.1	18.5	18.9	.....	18.7	19.0	18.9	18.7	17.7	.....	20.0	18.6	18.0
.....	16.7	18.1	17.4	.....	18.1	17.5	18.0	.....	17.9	18.9	19.0	18.7	18.3	.....	18.5	18.7	18.5
.....	16.3	14.8	14.8	.....	17.3	16.5	15.3	.....	13.8	14.1	13.9	14.8	14.3	.....	17.0	15.5	15.5
5.6	11.9	18.9	14.3	5.8	11.8	19.0	15.0	5.4	10.8	17.9	13.6	18.7	14.5	5.5	11.0	19.3	14.8
45.0	63.0	72.8	73.1	65.7	78.5	82.3	82.3	50.0	59.5	59.3	59.3	81.6	81.0	52.5	64.7	70.5	69.5
30.0	50.1	50.0	47.7	35.8	56.4	57.5	56.3	32.0	45.3	42.0	39.4	43.6	39.6	31.3	49.8	49.3	47.8
.....	29.8	30.5	30.1	.....	21.0	28.1	26.9	.....	23.6	23.2	22.5	33.6	30.7	.....	28.3	26.6	26.4
.....	19.4	31.3	32.5	.....	22.3	30.3	31.1	.....	18.3	30.2	30.1	28.9	30.6	.....	20.9	30.5	31.0
.....	55.0	67.5	67.5	.....	50.0	63.3	68.3	.....	46.0	44.2	45.8	55.6	60.0	.....	34.6	38.7	39.2
.....	56.8	71.8	71.8	.....	57.5	72.3	73.0	.....	54.2	60.3	64.3	87.5	116.6	.....	57.5	68.9	70.8

° No. 2½ can.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR 51 CITIES OF CERTAIN SPECIFIED DATES—Concluded.

Article.	Unit.	Seattle, Wash.			Springfield, Ill.			Washington, D. C.		
		Oct. 15.		Sept. 15.	Oct. 15.	Sept. 15.	Oct. 15.	Oct. 15.		Sept. 15.
				1920	1920	1920	1920			1920
		1913	1919					1913	1919	1920
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	24.3	36.0	36.7	36.0	33.4	43.2	41.0	27.4	48.8
Round steak.....	do.....	20.7	33.4	34.1	33.3	32.7	42.1	39.8	23.5	44.4
Rib roast.....	do.....	19.3	29.3	30.1	29.7	24.5	27.9	27.2	20.7	36.8
Chuck roast.....	do.....	16.0	22.5	21.0	21.3	20.5	24.9	23.7	17.3	29.6
Plate beef.....	do.....	13.0	18.3	17.1	17.0	16.3	17.9	17.2	12.7	18.9
Pork chops.....	do.....	24.3	48.9	52.0	50.9	39.5	47.5	46.9	23.5	49.8
Bacon.....	do.....	32.5	61.5	64.6	64.5	50.0	49.7	50.0	27.1	52.6
Ham.....	do.....	30.0	58.1	63.7	63.2	51.3	59.0	58.9	30.0	58.4
Lamb.....	do.....	17.7	32.3	34.2	33.3	33.3	39.2	37.5	19.1	38.4
Hens.....	do.....	24.3	42.8	40.0	36.8	31.0	44.5	35.3	22.5	45.8
Salmon (canned).....	do.....		34.1	38.9	38.0	35.3	39.8	39.5		33.0
Milk, fresh.....	Quart.....	9.7	15.0	14.6	14.0	16.7	16.7	16.7	9.0	18.0
Milk, evaporated.....	15-16 oz. can.....		15.4	14.6	13.5	18.2	17.7	17.4		16.1
Butter.....	Pound.....	40.0	73.9	72.9	65.1	72.7	67.9	69.3	40.3	74.1
Oleomargarine.....	do.....		40.2	41.7	41.3	44.3	41.6	40.8		43.0
Nut margarine.....	do.....		36.8	36.8	36.7	36.3	36.4	35.7		35.3
Cheese.....	do.....	22.7	43.0	40.7	40.8	43.5	41.8	41.9	23.5	42.8
Lard.....	do.....	17.1	38.5	29.2	31.8	36.3	28.3	29.3	15.1	35.6
Crisco.....	do.....		41.2	36.3	35.4	41.9	35.0	34.3		37.2
Eggs, strictly fresh.....	Dozen.....	50.0	82.5	73.3	85.3	61.1	61.2	70.3	36.9	71.7
Eggs, storage.....	do.....		64.8		66.7	58.0		64.7		60.5
Bread.....	Pound.....	5.2	11.5	11.5	10.0	13.5	13.5	5.7	10.1	12.2
Flour.....	do.....	2.9	6.6	7.4	6.9	7.4	8.5	8.0	3.8	7.8
Corn meal.....	do.....	3.3	7.4	7.3	7.0	6.5	7.7	6.9	2.7	5.6
Rolled oats.....	do.....		8.7	10.6	10.5	10.1	13.5	13.7		10.3
Corn flakes.....	8-oz. pkg.....		14.8	14.9	14.8	15.0	15.4	15.5		13.9
Cream of Wheat.....	28-oz. pkg.....		27.1	32.0	31.8	27.1	31.6	31.3		24.6
Macaroni.....	Pound.....		17.1	19.0	19.2	19.6	22.3	23.4		2.00
Rice.....	do.....	7.7	18.1	19.3	18.0	18.4	19.5	18.5	9.4	18.2
Beans, navy.....	do.....		11.8	9.9	9.5	12.8	12.3	10.8		12.6
Potatoes.....	do.....	1.4	3.0	3.2	2.8	3.8	4.2	3.4	2.0	3.9
Onions.....	do.....		5.5	4.0	4.2	6.6	6.1	5.5		6.6
Cabbage.....	do.....		4.6	3.6	3.0	4.3	4.6	3.7		5.2
Beans, baked.....	No. 2 can.....		21.5	20.0	19.8	18.6	18.4	18.3		14.9
Corn, canned.....	do.....		20.2	20.4	20.5	17.1	17.0	16.8		19.1
Peas, canned.....	do.....		21.3	20.2	20.3	17.6	17.8	18.2		18.6
Tomatoes, canned.....	do.....		¹⁰ 7.4	¹⁰ 16.3	¹⁰ 16.0	17.0	15.7	15.7		16.0
Sugar, granulated.....	Pound.....	6.4	10.9	18.9	14.1	15.3	17.8	14.7	5.1	11.1
Tea.....	do.....	50.0	63.3	70.3	69.8	83.8	88.5	85.9	57.5	77.9
Coffee.....	do.....	28.0	47.8	47.3	44.1	50.1	49.0	46.3	28.8	48.4
Prunes.....	do.....		27.3	27.1	26.8	30.5	33.1	29.9		32.1
Raisins.....	do.....		21.3	29.8	30.2	23.8	33.7	35.1		21.2
Bananas.....	Dozen.....		50.0	63.1	65.0	41.3	51.3	51.0		44.2
Oranges.....	do.....		56.1	70.1	79.2	51.6	75.9	78.4		56.3

¹⁰ No. 2½ can.

Comparison of Retail Food Costs in 51 Cities.

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of 22 food articles ⁶ in October, 1920, compared with the average cost in the year 1913, in October, 1919, and in September, 1920. For 11 other cities comparisons are given for the one-year and one-month periods. These cities have been scheduled by the bureau at different dates since 1913. For Savannah, Ga., the comparison is given only for the month, as this city was first scheduled by the bureau in 1920. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.⁷

Effort has been made by the bureau each month to have perfect reporting cities. For the month of August 96 per cent of all the firms reporting in the 51 cities sent in a report promptly. The report of every baker was received. The following were perfect reporting cities; that is, every merchant in the following-named cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Baltimore, Boston, Bridgeport, Butte, Charleston, Cleveland, Columbus, Denver, Detroit, Indianapolis, Kansas City, Louisville, Manchester, Milwaukee, Newark, New Haven, New York, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, Scranton, Springfield, Ill., and Washington, D. C.

The following summary shows the promptness with which the merchants responded in October:

RETAIL PRICE REPORTS RECEIVED DURING OCTOBER.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received.....	96	99	93	98	86	96
Number of cities in each section from which every report was received.....	28	10	4	9	1	4

⁶ For list of articles, see note 2, p. 25.

⁷ The consumption figure used for each article in each city is given in the MONTHLY LABOR REVIEW for November, 1918, pp. 94 and 95.

TABLE 6.—PERCENTAGE CHANGES IN THE RETAIL COST OF 22 FOOD ARTICLES IN OCTOBER, 1920, COMPARED WITH THE COST IN SEPTEMBER, 1920, OCTOBER, 1919, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

City.	Percentage increase October, 1920, compared with—		Percentage decrease October, 1920, compared with September, 1920.	City.	Percentage increase October, 1920, compared with—		Percentage decrease October, 1920, compared with September, 1920.
	1913	October, 1919.			1913	October, 1919.	
Atlanta.....	97	5	3	Minneapolis.....	93	1	5
Baltimore.....	104	3	2	Mobile.....		7	3
Birmingham.....	106	5	2	Newark.....	92	4	3
Boston.....	104	10	2	New Haven.....	100	8	3
Bridgeport.....		7	2	New Orleans.....	96	3	2
Buffalo.....	105	6	2	New York.....	100	7	1
Butte.....		9	2	Norfolk.....		4	2
Charleston.....	104	5	1	Omaha.....	97	1	6
Chicago.....	98	4	4	Peoria.....		2	2
Cincinnati.....	97	6	4	Philadelphia.....	96	3	2
Cleveland.....	102	6	3	Pittsburgh.....	96	3	4
Columbus.....		2	3	Portland, Me.....		9	4
Dallas.....	90	5	2	Portland, Oreg.....	78	1	5
Denver.....	86	2	4	Providence.....	108	7	3
Detroit.....	105	4	4	Richmond.....	112	5	1
Fall River.....	102	9	2	Rochester.....		6	2
Houston.....		7	10.1	St. Louis.....	101	4	4
Indianapolis.....	92	4	4	St. Paul.....		4	6
Jacksonville.....	87	3	2	Salt Lake City.....	80	5	2
Kansas City, Mo.....	98	4	3	San Francisco.....	83	6	4
Little Rock.....	88	2	3	Savannah.....			2
Los Angeles.....	80	10	3	Scranton.....	105	9	2
Louisville.....	89	0	3	Seattle.....	79	2	5
Manchester.....	105	9	3	Springfield, Ill.....		5	4
Memphis.....	97	1	4	Washington, D. C.....	103	2	3
Milwaukee.....	96	0	5				

¹ Increase.

² Decrease.

Retail Prices of Coal in the United States.¹

THE following table shows the average retail prices of coal on January 15, September 15, and October 15, 1920, for the United States and for each of the cities included in the total for the United States. Prices for coal are secured from the cities from which monthly retail prices of food are received.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds used. The coal dealers in each city are asked to quote prices on the kinds of bituminous coal usually sold for household use.

The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

¹ Prices of coal have formerly been secured semiannually and published in the March and September issues of the MONTHLY LABOR REVIEW. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES PER TON OF 2,000 POUNDS OF COAL FOR HOUSEHOLD USE,
ON JAN. 15, SEPT. 15, AND OCT. 15, 1920.

City, and kind of coal.	1920		
	Jan. 15.	Sept. 15.	Oct. 15.
United States:			
Pennsylvania anthracite—			
Stove.....	\$12.588	\$15.765	\$16.077
Chestnut.....	12.768	15.848	16.151
Bituminous.....	8.808	12.120	12.507
Atlanta, Ga.:			
Bituminous.....	9.050	14.938	14.596
Baltimore, Md.:			
Pennsylvania anthracite—			
Stove.....	¹ 12.500	¹ 15.500	¹ 15.500
Chestnut.....	¹ 12.600	¹ 15.500	¹ 15.500
Bituminous.....	¹ 7.500	¹ 10.469	¹ 11.125
Birmingham, Ala.:			
Bituminous.....	7.496	10.020	10.269
Boston, Mass.:			
Pennsylvania anthracite—			
Stove.....	12.750	16.000	16.000
Chestnut.....	12.750	16.000	16.000
Bridgeport, Conn.:			
Pennsylvania anthracite—			
Stove.....	12.500	17.200	17.954
Chestnut.....	12.500	17.200	17.954
Bituminous.....	8.500		
Buffalo, N. Y.:			
Pennsylvania anthracite—			
Stove.....	10.890	13.250	13.220
Chestnut.....	10.990	13.250	13.240
Butte, Mont.:			
Bituminous.....	10.381	12.548	12.570
Charleston, S. C.:			
Pennsylvania anthracite—			
Stove.....	¹ 13.400	¹ 17.000	¹ 17.875
Chestnut.....	¹ 13.500	¹ 16.850	¹ 17.725
Bituminous.....	8.500	12.750	13.000
Chicago, Ill.:			
Pennsylvania anthracite—			
Stove.....	12.590	16.878	16.710
Chestnut.....	12.690	17.033	16.750
Bituminous.....	8.020	10.780	10.940
Cincinnati, Ohio:			
Pennsylvania anthracite—			
Stove.....	12.500		15.725
Chestnut.....	12.667	15.000	15.500
Bituminous.....	6.739	8.893	9.000
Cleveland, Ohio:			
Pennsylvania anthracite—			
Stove.....	12.300	16.455	16.540
Chestnut.....	12.233	16.428	16.513
Bituminous.....	7.911	12.243	12.350
Columbus, Ohio:			
Pennsylvania anthracite—			
Chestnut.....	12.000	16.300	16.300
Bituminous.....	6.513	10.693	11.508
Dallas, Tex.:			
Arkansas anthracite—			
Egg.....	18.500	20.000	20.000
Bituminous.....	14.583	15.583	15.583
Denver, Colo.:			
Colorado anthracite—			
Stove, 3 and 5 mixed.....	14.000	16.995	17.600
Furnace, 1 and 2 mixed.....	13.500	16.995	17.600
Bituminous.....	8.908	11.371	11.667
Detroit, Mich.:			
Pennsylvania anthracite—			
Stove.....	12.650	15.667	16.500
Chestnut.....	12.750	16.417	16.438
Bituminous.....	8.781	14.300	14.029
Fall River, Mass.:			
Pennsylvania anthracite—			
Stove.....	13.000	16.000	17.500
Chestnut.....	12.750	15.500	16.500
Bituminous.....	10.000	13.000	14.000
Houston, Tex.:			
Bituminous.....	12.000	14.778	16.132
Indianapolis, Ind.:			
Pennsylvania anthracite—			
Stove.....	13.000	17.055	16.430
Chestnut.....	13.167	17.070	16.415
Bituminous.....	8.188	10.875	10.729

¹ Per ton of 2,240 pounds.

AVERAGE RETAIL PRICES PER TON OF 2,000 POUNDS OF COAL FOR HOUSEHOLD USE,
ON JAN. 15, SEPT. 15, AND OCT. 15, 1920—Continued.

City, and kind of coal.	1920		
	Jan. 15.	Sept. 15.	Oct. 15.
Jacksonville, Fla.:			
Pennsylvania anthracite—			
Stove.....	\$17.000	\$22.000	\$23.000
Chestnut.....	17.000	22.000	23.000
Bituminous.....	11.000	18.000	18.000
Kansas City, Mo.:			
Arkansas anthracite—			
Furnace.....	15.950	19.500	19.100
Stove, or No. 4.....	16.583	20.000	19.500
Bituminous.....	8.625	11.496	11.496
Little Rock, Ark.:			
Arkansas anthracite—			
Egg.....		16.500	17.000
Bituminous.....	10.375	14.875	15.462
Los Angeles, Calif.:			
Bituminous.....	16.000	19.000	19.111
Louisville, Ky.:			
Pennsylvania anthracite—			
Stove.....	13.750		
Chestnut.....	13.750	17.000	17.000
Bituminous.....	6.836	10.797	11.043
Manchester, N. H.:			
Pennsylvania anthracite—			
Stove.....	13.417	18.000	18.000
Chestnut.....	13.417	16.000	18.000
Bituminous.....	10.000	14.333	16.000
Memphis, Tenn.:			
Pennsylvania anthracite—			
Stove.....	16.000	18.000	18.000
Chestnut.....	16.000	18.000	18.000
Bituminous.....	8.000	11.550	11.550
Milwaukee, Wis.:			
Pennsylvania anthracite—			
Stove.....	12.600	15.210	15.970
Chestnut.....	12.700	15.290	16.050
Bituminous.....	8.960	13.719	14.510
Minneapolis, Minn.:			
Pennsylvania anthracite—			
Stove.....	14.000	17.240	18.350
Chestnut.....	14.100	17.300	18.430
Bituminous.....	10.425	14.365	15.131
Mobile, Ala.:			
Pennsylvania anthracite—			
Stove.....	17.000		
Chestnut.....	17.000		
Bituminous.....	10.333	13.328	14.202
Newark, N. J.:			
Pennsylvania anthracite—			
Stove.....	10.483	13.000	13.000
Chestnut.....	10.483	13.000	13.000
New Haven, Conn.:			
Pennsylvania anthracite—			
Stove.....	12.250	17.262	17.750
Chestnut.....	12.250	17.262	17.750
New Orleans, La.:			
Pennsylvania anthracite—			
Stove.....	17.500	22.500	22.500
Chestnut.....	17.500	22.500	22.500
Bituminous.....	9.289	14.400	14.327
New York, N. Y.:			
Pennsylvania anthracite—			
Stove.....	11.536	14.200	14.398
Chestnut.....	11.600	14.200	14.398
Norfolk, Va.:			
Pennsylvania anthracite—			
Stove.....	13.000	15.500	16.000
Chestnut.....	13.000	15.500	16.000
Bituminous.....	9.750	13.000	13.679
Omaha, Nebr.:			
Pennsylvania anthracite—			
Stove.....	17.275	23.900	23.900
Chestnut.....	17.450	24.000	24.000
Bituminous.....	10.108	14.477	14.753
Peoria, Ill.:			
Pennsylvania anthracite—			
Stove.....	13.000	16.215	
Chestnut.....	13.000	16.500	16.000
Bituminous.....	6.000	9.186	9.313

AVERAGE RETAIL PRICES PER TON OF 2,000 POUNDS OF COAL FOR HOUSEHOLD USE,
ON JAN. 15, SEPT. 15, AND OCT. 15, 1920—Concluded.

City, and kind of coal.	1920		
	Jan. 15.	Sept. 15.	Oct. 15.
Philadelphia, Pa.:			
Pennsylvania anthracite—			
Stove.....	2 \$11.881	2 \$14.833	2 \$14.888
Chestnut.....	2 11.906	2 14.838	2 14.888
Pittsburgh, Pa.:			
Pennsylvania anthracite—			
Stove.....	2 13.750	-----	2 19.000
Chestnut.....	2 14.000	-----	2 18.833
Bituminous.....	6.179	8.414	9.028
Portland, Me.:			
Pennsylvania anthracite—			
Stove.....	13.440	16.800	17.280
Chestnut.....	13.440	16.800	17.280
Bituminous.....	9.370	14.700	14.700
Portland, Oreg.:			
Bituminous.....	11.618	13.363	14.337
Providence, R. I.:			
Pennsylvania anthracite—			
Stove.....	3 12.950	3 16.000	3 16.200
Chestnut.....	3 13.000	3 16.000	3 16.200
Bituminous.....	3 10.000	3 14.125	3 14.833
Richmond, Va.:			
Pennsylvania anthracite—			
Stove.....	12.125	15.000	15.125
Chestnut.....	12.125	15.000	15.125
Bituminous.....	8.931	11.903	12.236
Rochester, N. Y.:			
Pennsylvania anthracite—			
Stove.....	10.800	13.375	13.375
Chestnut.....	10.900	13.475	13.475
St. Louis, Mo.:			
Pennsylvania anthracite—			
Stove.....	13.100	16.250	16.250
Chestnut.....	13.225	15.775	16.250
Bituminous.....	5.970	8.213	8.463
St. Paul, Minn.:			
Pennsylvania anthracite—			
Stove.....	14.000	17.217	18.292
Chestnut.....	14.100	17.267	18.325
Bituminous.....	11.531	15.746	16.879
Salt Lake City, Utah:			
Colorado anthracite—			
Furnace, 1 and 2 mixed.....	16.313	18.400	18.400
Stove, 3 and 5 mixed.....	16.583	18.500	18.500
Bituminous.....	8.236	9.750	9.750
San Francisco, Calif.:			
New Mexico anthracite—			
Cerrojos egg.....	23.000	27.500	28.650
Colorado anthracite—			
Egg.....	21.750	26.250	26.750
Bituminous.....	15.100	18.786	19.400
Savannah, Ga.:			
Pennsylvania anthracite—			
Stove.....	4 15.100	4 19.100	4 19.100
Chestnut.....	4 15.100	4 19.100	4 19.100
Bituminous.....	4 11.100	4 17.300	4 17.350
Scranton, Pa.:			
Pennsylvania anthracite—			
Stove.....	8.233	9.833	9.833
Chestnut.....	8.300	9.833	9.833
Seattle, Wash.:			
Bituminous.....	6 9.588	6 10.800	6 11.833
Springfield, Ill.:			
Bituminous.....	3.950	4.800	4.815
Washington, D. C.:			
Pennsylvania anthracite—			
Stove.....	2 12.447	2 15.514	2 15.543
Chestnut.....	2 12.538	2 15.471	2 15.500
Bituminous.....	2 8.267	2 11.370	2 11.515

² Per ton of 2,240 pounds.

³ Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

⁴ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

⁶ Prices in zone A. The cartage charge in zone A is \$1.85, which has been included in the average. The cartage charges in Seattle range from \$1.85 to \$2.80, according to distance.

Retail Prices of Dry Goods in the United States.¹

THE following table gives the average retail prices of 10 articles of dry goods on the 15th of October, 1915, 1916, 1917, 1918, 1919, and 1920. The averages given are based on the retail prices of standard brands only:

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON OCT. 15, 1915, 1916, 1917, 1918, 1919, AND 1920 IN 51 CITIES.

Article.	Unit.	Atlanta, Ga.						Baltimore, Md.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.075	\$ 0.100	\$ 0.108	\$ 0.250	\$ 0.250	.....	\$ 0.069	\$ 0.093	\$ 0.130	\$ 0.350	\$ 0.250	.....
Percale.....	do.	.125	.150	.243	.400	.390	0.508	.123	.151	.230	.409	.409	0.429
Gingham, apron, 27 to 28 inch.....	do.	.091	.105	.185	.320	.260	.280	.080	.094	.190	.292	.289	.257
Gingham, dress, 27-inch.....	do.	.118	.136	.196	.383	.387	.433	.120	.141	.240	.394	.381	.450
Gingham, dress, 32-inch.....	do.	.....	.....	.250	.521	.546	.643	.150	.165	.250	.521	.516	.610
Muslin, bleached.....	do.	.106	.131	.203	.338	.333	.402	.102	.124	.214	.384	.408	.315
Sheeting, bleached, 9-4.....	do.	.325	.406	.529	.788	.853	1.046	.303	.368	.550	.890	.919	1.125
Sheets, bleached, 81 by 90.....	Each.	.808	1.010	1.362	2.004	2.227	2.552	.778	.884	1.342	2.268	2.281	2.781
Outing flannel, 27 to 28 inch.....	Yard.	.109	.136	.186	.377	.369	.442	.115	.130	.223	.392	.373	.418
Flannel, white, wool, 27-inch.....	do.	.....	.....	.763	.750	.....	1.250	.....	.....	.900	.945	1.425	1.330
Blankets, cotton, 66 by 80.....	Pair..	.....	.....	3.740	4.792	5.153	5.903	.....	.....	.....	5.938	7.090	7.500
Birmingham, Ala.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.064	\$ 0.078	\$ 0.121	\$ 0.210	\$ 0.222	\$ 0.150	\$ 0.065	\$ 0.077	\$ 0.118	\$ 0.220	\$ 0.210	.....
Percale.....	do.	.125	.139	.258	.370	.400	.380	.121	.136	.190	.397	.415	0.373
Gingham, apron, 27 to 28 inch.....	do.	.076	.091	.150	.279	.277	.280	.084	.100	.190	.301	.274	.282
Gingham, dress, 27-inch.....	do.	.108	.126	.228	.413	.359	.413	.125	.135	.210	.368	.350	.364
Gingham, dress, 32-inch.....	do.	.150	.165	.250	.503	.588	.643	.150	.197	.250	.504	.545	.643
Muslin, bleached.....	do.	.104	.113	.187	.331	.342	.290	.120	.132	.223	.378	.398	.360
Sheeting, bleached, 9-4.....	do.	.276	.336	.450	.698	.788	.833	.316	.389	.518	.834	.871	1.041
Sheets, bleached, 81 by 90.....	Each.	.713	.845	1.170	1.838	2.013	2.162	.850	1.050	1.358	2.164	2.198	2.662
Outing flannel, 27 to 28 inch.....	Yard.	.107	.125	.170	.349	.368	.341	.117	.130	.193	.368	.321	.425
Flannel, white, wool, 27-inch.....	do.	.....	.....	.677	.990	.990	1.096	.....	.....	.925	1.125	1.050	1.383
Blankets, cotton, 66 by 80.....	Pair..	.....	.....	3.000	5.310	5.998	6.054	.....	.....	3.625	5.650	5.714	6.288
Bridgeport, Conn.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.073	\$ 0.117	\$ 0.190	\$ 0.190	\$ 0.190	.....	\$ 0.064	\$ 0.078	\$ 0.134	\$ 0.263	\$ 0.199	\$ 0.250
Percale.....	do.	.125	.190	.395	.385	0.478	.....	.125	.146	.235	.384	.406	.388
Gingham, apron, 27 to 28 inch.....	do.	.093	.143	.290	.262	.290	.....	.080	.100	.168	.307	.286	.303
Gingham, dress, 27-inch.....	do.	.128	.215	.377	.353	.448	.....	.117	.132	.201	.360	.360	.381
Gingham, dress, 32-inch.....	do.	.150	.240	.544	.564	.659	.....	.240	.....	.....	.579	.595	.629
Muslin, bleached.....	do.	.136	.186	.357	.368	.400	.....	.108	.132	.230	.346	.384	.357
Sheeting, bleached, 9-4.....	do.	.429	.605	.870	.921	1.148	.....	.338	.426	.588	.854	.947	1.142
Sheets, bleached, 81 by 90.....	Each.	1.000	1.370	2.155	2.248	2.738	.....	.903	1.124	1.539	2.108	2.261	2.817
Outing flannel, 27 to 28 inch.....	Yard.	.125	.170	.338	.333	.448	.....	.119	.131	.198	.377	.349	.385
Flannel, white, wool, 27-inch.....	do.	.....	.563	.760	.650	1.250	.....	.....	.....	1.038	.917	.987	1.115
Blankets, cotton, 66 by 80.....	Pair..	.....	2.750	6.950	5.750	6.640	.....	.....	.....	3.192	6.124	6.350	6.349
Butte, Mont.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.071	\$ 0.076	\$ 0.108	\$ 0.168	\$ 0.174	\$ 0.250	\$ 0.065	\$ 0.083	\$ 0.144	\$ 0.253	\$ 0.250	\$ 0.177
Percale.....	do.	.150	.158	.233	.329	.388	.483	.125	.150	.223	.388	.398	.370
Gingham, apron, 27 to 28 inch.....	do.	.083	.103	.125	.250	.250	.250	.080	.098	.156	.286	.273	.240
Gingham, dress, 27-inch.....	do.	.142	.147	.221	.363	.365	.386	.113	.132	.203	.350	.341	.362
Gingham, dress, 32-inch.....	do.	.175	.290	.290	.533	.463	.570	.150	.....	.220	.413	.514	.507
Muslin, bleached.....	do.	.129	.146	.188	.363	.366	.350	.102	.120	.215	.312	.361	.281
Sheeting, bleached, 9-4.....	do.	.369	.434	.533	.839	.925	1.217	.360	.403	.561	.831	.971	.996
Sheets, bleached, 81 by 90.....	Each.	1.125	1.300	1.717	2.242	2.350	3.000	.875	1.034	1.464	2.016	2.254	2.267
Outing flannel, 27 to 28 inch.....	Yard.	.125	.125	.190	.349	.336	.407	.113	.129	.217	.368	.324	.339
Flannel, white, wool, 27-inch.....	do.	.....	.....	.850	.850	.963	1.088	.....	.....	.450	.650	1.267	1.010
Blankets, cotton, 66 by 80.....	Pair..	.....	4.550	5.990	5.800	5.900	.....	.....	.....	3.250	5.160	5.738	4.727
Charleston, S. C.													

¹ Retail prices of dry goods are published in the April, July, October, and December issues of the MONTHLY LABOR REVIEW.

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON OCT. 15, 1915, 1916, 1917, 1918, 1919, AND 1920 IN 51 CITIES—Continued.

Article.	Unit.	Chicago, Ill.						Cincinnati, Ohio.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.063	\$ 0.088	\$ 0.125	\$ 0.246	\$ 0.216	\$ 0.216	\$ 0.063	\$ 0.079	\$ 0.120	\$ 0.238	\$ 0.233	\$ 0.226
Percalé.....	do.	.125	.150	.250	.350	.425	.458	.125	.142	.250	.319	.400	.465
Gingham, apron, 27 to 28 inch.....	do.	.076	.097	.140	.268	.254	.274	.076	.094	.175	.270	.273	.270
Gingham, dress, 27-inch.....	do.	.121	.145	.216	.363	.368	.383	.113	.131	.202	.314	.327	.410
Gingham, dress, 32-inch.....	do.	.250	.250	.350	.614	.602	.805	.150	.165	.....	.588	.596	.713
Muslin, bleached.....	do.	.100	.121	.213	.343	.385	.282	.103	.123	.179	.303	.346	.375
Sheeting, bleached, 9-4.....	do.	.313	.391	.607	.801	.955	1.023	.297	.362	.508	.798	.839	.999
Sheets, bleached, 81 by 90.....	Each.	.801	1.021	1.600	2.140	2.244	2.523	.785	.930	1.288	1.999	2.283	2.540
Outing flannel, 27 to 28 inch.....	Yard.	.118	.139	.205	.364	.367	.322	.117	.125	.172	.388	.356	.347
Flannel, white, wool, 27-inch.....	do.	.....	.....	.797	.900	1.375	1.150	.....	.....	.750	.650	.....	1.193
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	3.883	5.433	5.765	6.255	.....	.....	.....	6.400	5.950	6.898
		Cleveland, Ohio.						Columbus, Ohio.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.068	\$ 0.065	\$ 0.108	\$ 0.233	\$ 0.180	\$ 0.200	.....	\$ 0.080	\$ 0.118	\$ 0.230	\$ 0.225	\$ 0.250
Percalé.....	do.	.125	.142	.210	.387	.420	.392	.....	.167	.219	.383	.420	.522
Gingham, apron, 27 to 28 inch.....	do.	.080	.086	.142	.307	.280	.290	.....	.104	.150	.307	.265	.268
Gingham, dress, 27-inch.....	do.	.125	.142	.197	.352	.369	.379	.....	.145	.300	.371	.383	.459
Gingham, dress, 32-inch.....	do.	.250	.250	.....	.545	.626	.691	.....	.218	.367	.592	.596	.685
Muslin, bleached.....	do.	.118	.131	.219	.358	.384	.336	.....	.139	.213	.348	.389	.367
Sheeting, bleached, 9-4.....	do.	.356	.444	.564	.829	.944	.926	.....	.408	.590	.806	.995	1.170
Sheets, bleached, 81 by 90.....	Each.	.893	1.114	1.476	2.124	2.243	2.265	.....	1.067	1.450	2.047	2.306	2.613
Outing flannel, 27 to 28 inch.....	Yard.	.119	.134	.180	.362	.354	.374	.....	.138	.194	.424	.384	.450
Flannel, white, wool, 27-inch.....	do.	.....	.....	.875	1.175	.....	1.250	.....	.....	1.100	1.125	.....	.....
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	4.625	5.938	6.917	6.680	.....	.....	4.500	6.567	5.330	6.102
		Dallas, Tex.						Denver, Colo.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.058	\$ 0.076	\$ 0.125	\$ 0.217	\$ 0.196	\$ 0.200	\$ 0.070	\$ 0.088	\$ 0.122	\$ 0.238	\$ 0.201	\$ 0.200
Percalé.....	do.	.144	.144	.198	.358	.375	.387	.144	.158	.225	.490	.457	.580
Gingham, apron, 27 to 28 inch.....	do.	.077	.094	.158	.250	.250	.235	.088	.100	.175	.342	.333	.325
Gingham, dress, 27-inch.....	do.	.114	.128	.200	.325	.369	.358	.128	.146	.255	.360	.393	.473
Gingham, dress, 32-inch.....	do.	.....	.....	.....	.538	.559	.615	.....	.175	.350	.638	.709	.753
Muslin, bleached.....	do.	.103	.122	.191	.291	.325	.272	.117	.141	.233	.370	.415	.390
Sheeting, bleached, 9-4.....	do.	.285	.348	.473	.756	.855	.926	.322	.436	.621	.953	1.070	1.145
Sheets, bleached, 81 by 90.....	Each.	.767	.958	1.173	1.925	2.042	2.298	.836	1.070	1.732	2.359	2.637	2.845
Outing flannel, 27 to 28 inch.....	Yard.	.113	.125	.210	.340	.332	.336	.125	.145	.206	.396	.387	.486
Flannel, white, wool, 27-inch.....	do.	.....	.....	.700	.788	.717	1.125	.....	.....	1.175	1.140	1.067	1.367
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	3.750	6.483	6.956	7.079	.....	.....	4.000	5.950	6.381	7.688
		Detroit, Mich.						Fall River, Mass.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.070	\$ 0.093	\$ 0.143	\$ 0.202	\$ 0.190	\$ 0.197	\$ 0.070	.....	\$ 0.090	\$ 0.190	.....	.....
Percalé.....	do.	.125	.150	.225	.392	.462	.447	.125	.140	.177	.373	.0.337	.0.420
Gingham, apron, 27 to 28 inch.....	do.	.086	.105	.160	.287	.260	.294	.088	.099	.150	.290	.250	.263
Gingham, dress, 27-inch.....	do.	.125	.140	.238	.326	.358	.383	.119	.131	.177	.316	.342	.395
Gingham, dress, 32-inch.....	do.	.150	.220	.320	.540	.490	.689	.....	.....	.....	.520	.543	.590
Muslin, bleached.....	do.	.127	.140	.231	.366	.421	.342	.115	.134	.220	.350	.365	.380
Sheeting, bleached, 9-4.....	do.	.330	.418	.594	.840	1.008	.992	.345	.412	.545	.835	.847	1.083
Sheets, bleached, 81 by 90.....	Each.	.933	1.170	1.608	2.188	2.507	2.548	.878	1.133	1.413	2.080	2.110	2.488
Outing flannel, 27 to 28 inch.....	Yard.	.120	.139	.198	.361	.364	.420	.108	.132	.207	.373	.338	.420
Flannel, white, wool, 27-inch.....	do.	.....	.....	1.138	1.025	1.145	1.067	.....	.....	.....	1.057	.890	.....
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	.....	4.696	6.250	6.242	.....	.....	.....	5.435	5.903	5.937

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON OCT. 15, 1915, 1916, 1917, 1918, 1919, AND 1920 IN 51 CITIES—Continued.

Article.	Unit.	Houston, Tex.						Indianapolis, Ind.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.				\$ 0.203	\$ 0.210	\$ 0.210	\$ 0.060	\$ 0.075	\$ 0.121	\$ 0.257	\$ 0.193	\$ 0.223
Percale.....	do.				.350	.388	.360	.125	.144	.200	.368	.410	.458
Gingham, apron, 27 to 28 inch.....	do.				.268	.260	.245	.076	.092	.150	.304	.270	.281
Gingham, dress, 27-inch.....	do.				.329	.351	.325	.120	.133	.209	.349	.364	.407
Gingham, dress, 32-inch.....	do.				.512	.589	.544			.250	.508	.492	.575
Muslin, bleached.....	do.				.301	.326	.250	.109	.126	.193	.326	.346	.386
Sheeting, bleached, 9-4.....	do.				.755	.815	.776	.308	.385	.564	.829	.894	1.076
Sheets, bleached, 81 by 90.....	Each.				1.883	2.037	2.317	.803	.995	1.319	2.054	2.208	2.606
Outing flannel, 27 to 28 inch.....	Yard.				.360	.310	.335	.118	.129	.180	.378	.328	.397
Flannel, white, wool, 27-inch.....	do.				.615	.743	.974			.790	.835	.895	1.195
Blankets, cotton, 66 by 80.....	Pair..				7.467	6.472	7.047			3.397	5.988	6.240	6.622
Jacksonville, Fla.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.070	\$ 0.100	\$ 0.150	\$ 0.254		\$ 0.290	\$ 0.072	\$ 0.080	\$ 0.125	\$ 0.247	\$ 0.223	\$ 0.255
Percale.....	do.	.113	.165	.250	.442	.463	.445	.142	.150	.235	.436	.441	.517
Gingham, apron, 27 to 28 inch.....	do.	.078	.113	.190	.314	.350	.290	.086	.102	.187	.316	.316	.250
Gingham, dress, 27-inch.....	do.	.117	.150	.200	.368	.390	.397	.115	.146	.216	.390	.373	.446
Gingham, dress, 32-inch.....	do.	.150	.180	.250	.524	.550	.656				.588	.685	.737
Muslin, bleached.....	do.	.106	.131	.238	.348	.436	.408	.115	.135	.211	.359	.445	.411
Sheeting, bleached, 9-4.....	do.	.338	.373	.525	.831	.950	1.000	.332	.403	.553	.894	.980	1.077
Sheets, bleached, 81 by 90.....	Each.	.795	.990	1.375	2.035	2.375	2.363	.762	1.000	1.400	2.229	2.360	2.725
Outing flannel, 27 to 28 inch.....	Yard.	.108	.150	.190	.351	.345	.410	.115	.138	.185	.400	.342	.453
Flannel, white, wool, 27-inch.....	do.				.650	.775	.850			.875			
Blankets, cotton, 66 by 80.....	Pair..			3.625	5.995	6.500	7.143				6.108	6.660	6.893
Little Rock, Ark.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.067	\$ 0.087	\$ 0.125	\$ 0.201	\$ 0.190	\$ 0.233	\$ 0.070	\$ 0.091	\$ 0.119	\$ 0.255	\$ 0.180	.....
Percale.....	do.	.125	.150	.225	.361	.388	.426	.150	.164	.231	.439	.450	.509
Gingham, apron, 27 to 28 inch.....	do.	.087	.096	.163	.280	.267	.238	.082	.100	.171	.350	.292	.306
Gingham, dress, 27-inch.....	do.	.118	.135	.193	.325	.336	.374	.118	.132	.248	.400	.398	.431
Gingham, dress, 32-inch.....	do.				.495	.450	.563	.138	.215	.300	.549	.611	.681
Muslin, bleached.....	do.	.113	.127	.204	.309	.317	.321	.115	.132	.213	.360	.385	.379
Sheeting, bleached, 9-4.....	do.	.309	.384	.528	.806	.850	.943	.320	.414	.598	.812	.887	1.032
Sheets, bleached, 81 by 90.....	Each.	.798	.918	1.340	1.915	1.975	2.361	.815	1.050	1.590	2.066	2.177	2.606
Outing flannel, 27 to 28 inch.....	Yard.	.111	.129	.190	.336	.342	.356	.115	.142	.190	.397	.396	.429
Flannel, white, wool, 27-inch.....	do.				.650	1.125	1.050	1.156		1.250	1.100	1.200	1.333
Blankets, cotton, 66 by 80.....	Pair..			3.750	4.910	4.792	6.488			2.500	5.969	6.636	6.756
Louisville, Ky.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.063	\$ 0.081	\$ 0.127	\$ 0.244	\$ 0.222	\$ 0.225	\$ 0.067	\$ 0.080	\$ 0.122	\$ 0.279	\$ 0.216	\$ 0.258
Percale.....	do.	.120	.145	.217	.410	.396	.469	.120	.127	.190	.398	.381	.449
Gingham, apron, 27 to 28 inch.....	do.	.071	.100	.188	.299	.272	.250	.080	.094	.125	.284	.244	.253
Gingham, dress, 27-inch.....	do.	.115	.138	.234	.403	.385	.433	.118	.127	.213	.353	.362	.341
Gingham, dress, 32-inch.....	do.				.583	.634	.714				.513	.560	.591
Muslin, bleached.....	do.	.096	.120	.194	.341	.352	.298	.106	.137	.230	.355	.370	.381
Sheeting, bleached, 9-4.....	do.	.234	.354	.482	.778	.841	.970	.316	.403	.581	.834	.913	1.033
Sheets, bleached, 81 by 90.....	Each.	.797	.920	1.348	1.961	2.205	2.655	.877	1.053	1.530	1.958	2.369	2.431
Outing flannel, 27 to 28 inch.....	Yard.	.112	.141	.208	.403	.319	.432	.098	.123	.204	.388	.331	.371
Flannel, white, wool, 27-inch.....	do.				.875		.920	1.125		1.250	1.285	.983	1.095
Blankets, cotton, 66 by 80.....	Pair..				5.960	6.500	6.903			2.980	4.926	4.988	5.560
Manchester, N. H.													

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON OCT. 15, 1915, 1916, 1917, 1918, 1919, AND 1920 IN 51 CITIES—Continued.

Article.	Unit.	Memphis, Tenn.						Milwaukee, Wis.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.061	\$ 0.086	\$ 0.120	\$ 0.259	\$ 0.225	\$ 0.256	\$ 0.064	\$ 0.081	\$ 0.116	\$ 0.209	\$ 0.244	\$ 0.195
Percale.....	do.	.125	.164	.220	.424	.424	.466	.125	.150	.207	.430	.414	.487
Gingham, apron, 27 to 28 inch.....	do.	.085	.100	.150	.293	.310	.281	.080	.100	.150	.278	.267	.288
Gingham, dress, 27-inch.....	do.	.113	.138	.238	.352	.366	.493	.121	.135	.207	.345	.357	.412
Gingham, dress, 32-inch.....	do.	.....	.....	.....	.546	.588	.722	.165	.180	.250	.549	.548	.708
Muslin, bleached.....	do.	.109	.137	.204	.348	.379	.334	.110	.125	.175	.335	.384	.387
Sheeting, bleached, 9-4.....	do.	.328	.406	.563	.854	.934	1.120	.303	.407	.572	.825	.848	1.086
Sheets, bleached, 81 by 90.....	Each.	.843	1.075	1.411	2.164	2.426	2.667	.782	1.061	1.604	2.133	2.180	2.679
Outing flannel, 27 to 28 inch.....	Yard.	.114	.131	.178	.360	.359	.416	.120	.136	.200	.331	.343	.468
Flannel, white, wool, 27-inch.....	do.	.....	.....	1.000	1.350	1.000	1.288	.....	.....	.750	.850	.750	.750
Blankets, cotton, 66 by 80.....	Pair..	.....	.....	3.250	6.033	6.209	6.495	.....	.....	3.740	6.079	6.300	6.849
		Minneapolis, Minn.						Mobile, Ala.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.072	\$ 0.086	\$ 0.127	\$ 0.226	\$ 0.171	\$ 0.177	.....	.....	.....	\$ 0.246	\$ 0.225	\$ 0.250
Percale.....	do.	.138	.145	.240	.387	.387	.369	.....	.....	.....	.373	.405	.443
Gingham, apron, 27 to 28 inch.....	do.	.086	.100	.161	.273	.258	.213	.....	.....	.....	.280	.270	.270
Gingham, dress, 27-inch.....	do.	.136	.143	.246	.346	.354	.384	.....	.....	.....	.358	.339	.402
Gingham, dress, 32-inch.....	do.	.250	.250	.295	.606	.634	.741	.....	.....	.....	.531	.534	.596
Muslin, bleached.....	do.	.130	.138	.202	.340	.380	.316	.....	.....	.....	.341	.349	.322
Sheeting, bleached, 9-4.....	do.	.322	.411	.523	.812	.853	.961	.....	.....	.....	.806	.750	.908
Sheets, bleached, 81 by 90.....	Each.	.889	1.062	1.406	2.163	2.361	2.561	.....	.....	.....	2.071	2.250	2.533
Outing flannel, 27 to 28 inch.....	Yard.	.119	.142	.188	.408	.344	.385	.....	.....	.....	.853	.313	.416
Flannel, white, wool, 27-inch.....	do.	.....	.....	.933	.800	.....	1.047	.....	.....	.....	.....	.725	.790
Blankets, cotton, 66 by 80.....	Pair..	.....	.....	3.500	5.762	5.779	6.105	.....	.....	.....	6.107	6.497	6.605
		Newark, N. J.						New Haven, Conn.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.065	\$ 0.080	\$ 0.125	\$ 0.260	\$ 0.238	\$ 0.170	\$ 0.066	\$ 0.081	\$ 0.131	\$ 0.233	\$ 0.227	\$ 0.208
Percale.....	do.	.125	.157	.235	.430	.408	.424	.125	.146	.218	.393	.370	.394
Gingham, apron, 27 to 28 inch.....	do.	.080	.097	.150	.270	.250	.244	.080	.102	.161	.293	.288	.246
Gingham, dress, 27-inch.....	do.	.125	.135	.244	.373	.355	.373	.127	.147	.212	.338	.362	.390
Gingham, dress, 32-inch.....	do.	.183	.203	.295	.553	.609	.671	.138	.210	.250	.537	.553	.595
Muslin, bleached.....	do.	.100	.122	.213	.330	.391	.323	.104	.131	.210	.351	.374	.349
Sheeting, bleached, 9-4.....	do.	.340	.410	.546	.849	.845	1.055	.306	.394	.501	.778	.824	.957
Sheets, bleached, 81 by 90.....	Each.	.880	1.063	1.370	2.072	2.316	2.667	.831	1.041	1.340	1.975	2.011	2.578
Outing flannel, 27 to 28 inch.....	Yard.	.120	.133	.191	.372	.349	.364	.109	.122	.173	.342	.310	.346
Flannel, white, wool, 27-inch.....	do.	.....	.....	1.367	1.650	1.220	1.410	.....	.....	.995	1.013	.935	1.275
Blankets, cotton, 66 by 80.....	Pair..	.....	.....	3.740	5.750	5.271	6.039	.....	.....	3.000	4.688	5.996	6.000
		New Orleans, La.						New York, N. Y.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.060	\$ 0.080	\$ 0.150	\$ 0.250	\$ 0.217	\$ 0.220	\$ 0.070	\$ 0.085	\$ 0.139	\$ 0.264	\$ 0.250	\$ 0.240
Percale.....	do.	.102	.140	.220	.375	.375	.414	.128	.156	.208	.424	.450	.413
Gingham, apron, 27 to 28 inch.....	do.	.087	.100	.163	.267	.290	.250	.079	.093	.154	.281	.295	.296
Gingham, dress, 27-inch.....	do.	.107	.111	.197	.336	.338	.366	.120	.138	.216	.368	.390	.429
Gingham, dress, 32-inch.....	do.	.....	.....	.....	.459	.584	.750	.138	.155	.250	.552	.659	.796
Muslin, bleached.....	do.	.095	.128	.183	.317	.341	.278	.105	.126	.213	.366	.380	.335
Sheeting, bleached, 9-4.....	do.	.325	.380	.....	.760	.784	.743	.331	.406	.569	.923	.951	1.104
Sheets, bleached, 81 by 90.....	Each.	.783	.850	1.150	1.888	1.946	2.040	.822	1.028	1.392	2.189	2.326	2.664
Outing flannel, 27 to 28 inch.....	Yard.	.100	.106	.....	.339	.308	.349	.106	.126	.188	.388	.338	.398
Flannel, white, wool, 27-inch.....	do.	.....	.....	.....	.....	.590	1.000	.....	.....	.870	1.022	1.070	1.147
Blankets, cotton, 66 by 80.....	Pair..	.....	.....	.....	.....	5.986	6.457	.....	.....	3.750	5.750	5.975	6.729

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON OCT. 15, 1915, 1916, 1917, 1918, 1919, AND 1920 IN 51 CITIES—Continued.

Article.	Unit.	Norfolk, Va.						Omaha, Nebr.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.				\$ 0.250	\$ 0.263	\$ 0.250	\$ 0.066	\$ 0.077	\$ 0.134	\$ 0.237	\$ 0.202	\$ 0.213
Percale.....	do.				.434	.437	.463	.128	.148	.250	.389	.399	.497
Gingham, apron, 27 to 28 inch.....	do.				.295	.305	.280	.074	.093	.168	.287	.277	.308
Gingham, dress, 27-inch.....	do.				.365	.376	.406	.117	.138	.205	.367	.346	.473
Gingham, dress, 32-inch.....	do.				.572	.568	.603				.608	.652	.682
Muslin, bleached.....	do.				.354	.381	.365	.100	.119	.187	.362	.371	.385
Sheeting, bleached, 9-4.....	do.				.782	.873	1.030	.308	.351	.530	.776	.895	1.173
Sheets, bleached, 81 by 90.....	Each.				2.062	2.174	2.617	.805	.952	1.342	2.071	2.257	2.620
Outing flannel, 27 to 28 inch.....	Yard.				.352	.355	.400	.117	.130	.189	.371	.368	.436
Flannel, white, wool, 27-inch.....	do.				1.000	1.125	1.167			.900	1.163	1.283	1.406
Blankets, cotton, 66 by 80.....	Pair.				6.796	6.740	6.236			3.342	6.667	6.520	6.802
		Peoria, Ill.						Philadelphia, Pa.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.				\$ 0.207	\$ 0.186	\$ 0.203	\$ 0.069	\$ 0.088	\$ 0.133	\$ 0.211	\$ 0.250	\$ 0.210
Percale.....	do.				.343	.340	.490	.125	.150	.235	.376	.414	.375
Gingham, apron, 27 to 28 inch.....	do.				.223	.248	.227	.080	.095	.171	.289	.268	.271
Gingham, dress, 27-inch.....	do.				.307	.356	.370	.122	.148	.202	.367	.344	.379
Gingham, dress, 32-inch.....	do.				.513	.540	.735	.250	.265	.380	.521	.576	.682
Muslin, bleached.....	do.				.350	.347	.286	.106	.130	.213	.329	.377	.286
Sheeting, bleached, 9-4.....	do.				.705	.991	.990	.329	.393	.553	.866	.865	.924
Sheets, bleached, 81 by 90.....	Each.				2.208	2.363	2.632	.832	1.004	1.443	2.047	2.144	2.351
Outing flannel, 27 to 28 inch.....	Yard.				.340	.375	.395	.105	.131	.182	.391	.348	.396
Flannel, white, wool, 27-inch.....	do.					.790				.800	1.022	.883	1.287
Blankets, cotton, 66 by 80.....	Pair.				6.125	5.717	7.293			3.250	4.836	6.095	6.137
		Pittsburgh, Pa.						Portland, Me.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.069	\$ 0.085	\$ 0.119	\$ 0.276	\$ 0.199	\$ 0.230				\$	\$	\$
Percale.....	do.	.125	.150	.223	.361	.385	.476				0.398	0.390	0.357
Gingham, apron, 27 to 28 inch.....	do.	.079	.093	.166	.286	.274	.243				.310	.250	.290
Gingham, dress, 27-inch.....	do.	.123	.131	.215	.339	.332	.386				.390	.330	.390
Gingham, dress, 32-inch.....	do.	.173	.160	.235	.554	.603	.690				.535	.519	.701
Muslin, bleached.....	do.	.108	.126	.201	.338	.361	.327				.338	.265	.373
Sheeting, bleached, 9-4.....	do.	.328	.391	.578	.857	.917	1.010				.775	.814	.965
Sheets, bleached, 81 by 90.....	Each.	.818	1.008	1.412	2.090	2.181	2.635				.976	2.000	2.498
Outing flannel, 27 to 28 inch.....	Yard.	.117	.133	.193	.352	.335	.387				.372	.348	.428
Flannel, white, wool, 27-inch.....	do.			.920	.800	1.068	1.250				1.122	1.250	1.445
Blankets, cotton, 66 by 80.....	Pair.				6.536	5.511	5.250				5.495	5.625	5.693
		Portland, Oreg.						Providence, R. I.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.065	\$ 0.074	\$ 0.127	\$ 0.239	\$ 0.188	\$ 0.221	\$ 0.073	\$ 0.080	\$ 0.130	\$ 0.274	\$ 0.230	\$ 0.235
Percale.....	do.	.150	.148	.228	.370	.400	.421	.124	.125	.188	.372	.383	.404
Gingham, apron, 27 to 28 inch.....	do.	.080	.088	.147	.280	.273	.300	.090	.109	.170	.297	.275	.290
Gingham, dress, 27-inch.....	do.	.120	.128	.196	.366	.367	.345	.122	.129	.188	.370	.359	.412
Gingham, dress, 32-inch.....	do.				.480	.496	.704	.150		.230	.523	.568	.614
Muslin, bleached.....	do.	.113	.121	.200	.325	.349	.350	.108	.131	.217	.352	.371	.371
Sheeting, bleached, 9-4.....	do.	.324	.379	.542	.769	.846	.900	.324	.375	.498	.823	.947	1.037
Sheets, bleached, 81 by 90.....	Each.	.950	1.034	1.467	1.960	2.162	2.390	.845	1.016	1.422	2.230	2.230	2.722
Outing flannel, 27 to 28 inch.....	Yard.	.115	.136	.176	.347	.328	.332	.118	.120		.390	.370	.448
Flannel, white, wool, 27-inch.....	do.				.983	.900	1.167			.900	.990	1.100	1.290
Blankets, cotton, 66 by 80.....	Pair.			4.950	6.063	6.250	7.438			3.290	6.018	5.888	6.488
		Richmond, Va.						Rochester, N. Y.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.067	\$ 0.086	\$ 0.131	\$ 0.238	\$ 0.216	\$ 0.224	\$ 0.074	\$ 0.095	\$ 0.198	\$ 0.185	\$ 0.150	
Percale.....	do.	.125	.146	.221	.409	.384	.386	.138	.200	.372	.397	.354	
Gingham, apron, 27 to 28 inch.....	do.	.082	.099	.168	.294	.273	.257	.091	.150	.248	.248	.226	
Gingham, dress, 27-inch.....	do.	.120	.140	.234	.342	.358	.358	.130	.223	.337	.323	.363	
Gingham, dress, 32-inch.....	do.			.250	.471	.511	.585	.215	.320	.522	.629	.604	
Muslin, bleached.....	do.	.112	.139	.222	.365	.371	.310	.116	.201	.309	.346	.320	
Sheeting, bleached, 9-4.....	do.	.316	.404	.581	.844	.933	.935	.369	.508	.775	.878	1.027	
Sheets, bleached, 81 by 90.....	Each.	.831	1.026	1.392	2.075	2.265	2.349	1.036	1.387	2.075	2.229	2.538	
Outing flannel, 27 to 28 inch.....	Yard.	.115	.131	.184	.353	.354	.373	.122	.200	.355	.327	.333	
Flannel, white, wool, 27-inch.....	do.			.617	.914	.793	1.125			.590		1.243	
Blankets, cotton, 66 by 80.....	Pair.			3.185	6.237	5.567	5.982			4.750	5.988	6.870	7.033

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON OCT. 15, 1915, 1916, 1917, 1918, 1919, AND 1920 IN 51 CITIES—Concluded.

Article.	Unit.	St. Louis, Mo.						St. Paul, Minn.					
		Average retail price on Oct. 15—						Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920	1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard.	\$ 0.064	\$ 0.081	\$ 0.141	\$ 0.250	\$ 0.220	\$ 0.210	\$ 0.060	\$ 0.078	\$ 0.108	\$ 0.214	\$ 0.231	\$ 0.194
Percalé.....	do.	.125	.155	.250	.430	.430	.390	.131	.150	.210	.361	.388	.366
Gingham, apron, 27 to 28 inch.....	do.	.075	.093	.150	.290	.280	.250	.074	.100	.147	.284	.255	.255
Gingham, dress, 27-inch.....	do.	.121	.131	.245	.372	.357	.403	.119	.128	.172	.349	.374	.363
Gingham, dress, 32-inch.....	do.	.125	.180	.290	.651	.700	.793	.150	.....	.....	.538	.565	.620
Muslin, bleached.....	do.	.093	.127	.193	.361	.376	.355	.114	.134	.208	.344	.397	.342
Sheeting, bleached, 9-4.....	do.	.294	.376	.540	.810	.922	1.050	.306	.361	.474	.867	.894	.938
Sheets, bleached, 81 by 90.....	Each.	.733	.945	1.318	1.987	2.415	2.451	.865	1.002	1.370	2.227	2.225	2.608
Outing flannel, 27 to 28 inch.....	Yard.	.114	.133	.195	.388	.366	3.58	.113	.125	.170	.359	.328	.383
Flannel, white, wool, 27-inch.....	do.	.....	.....	.700	.875	.925	1.197	.....	.....	.835	.....	1.190	.....
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	.....	6.750	5.250	6.166	.....	.....	.....	5.542	5.942	6.368
Salt Lake City, Utah.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.068	\$ 0.083	\$ 0.142	\$ 0.204	\$ 0.200	\$ 0.250	\$ 0.069	\$ 0.089	.....	.....	\$ 0.450	.....
Percalé.....	do.	.150	.146	.238	.424	.440	.499	.142	.166	0.250	0.460	.510	0.588
Gingham, apron, 27 to 28 inch.....	do.	.083	.110	.167	.294	.266	.276	.086	.108	.193	.300	.363	.305
Gingham, dress, 27-inch.....	do.	.128	.141	.234	.366	.395	.372	.118	.134	.214	.350	.397	.403
Gingham, dress, 32-inch.....	do.	.....	.290	.....	.656	.683	.642	.....	.....	.....	.545	.550	.668
Muslin, bleached.....	do.	.116	.128	.203	.329	.382	.345	.112	.131	.230	.336	.396	.398
Sheeting, bleached, 9-4.....	do.	.341	.413	.571	.826	.945	1.143	.346	.421	.626	.854	.950	1.213
Sheets, bleached, 81 by 90.....	Each.	.970	1.257	1.638	2.082	2.776	2.803	.958	1.067	1.540	2.077	2.327	2.857
Outing flannel, 27 to 28 inch.....	Yard.	.128	.143	.216	.388	.361	.394	.116	.136	.213	.418	.405	.437
Flannel, white, wool, 27-inch.....	do.	.....	.....	.733	1.573	1.593	1.598	.....	.....	1.100	1.200	1.200	1.625
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	.....	6.366	7.019	6.661	.....	.....	.....	5.762	6.950	6.430
Savannah, Ga.													
Calico, 24 to 25 inch.....	Yard.	.....	.....	.....	.....	.....	.....	\$ 0.060	\$ 0.078	\$ 0.125	\$ 0.225	\$ 0.230	\$ 0.250
Percalé.....	do.	.....	.....	.....	.....	.....	0.400	.123	.133	.220	.337	.395	.373
Gingham, apron, 27 to 28 inch.....	do.	.....	.....	.....	.....	.....	.250	.074	.090	.158	.287	.290	.263
Gingham, dress, 27-inch.....	do.	.....	.....	.....	.....	.....	.392	.112	.135	.185	.344	.341	.373
Gingham, dress, 32-inch.....	do.	.....	.....	.....	.....	.....	.620	.....	.....	.....	.553	.558	.613
Muslin, bleached.....	do.	.....	.....	.....	.....	.....	.345	.097	.113	.198	.352	.352	.327
Sheeting, bleached, 9-4.....	do.	.....	.....	.....	.....	.....	.823	.300	.377	.546	.799	.919	1.075
Sheets, bleached, 81 by 90.....	Each.	.....	.....	.....	.....	.....	2.232	.808	.935	1.320	2.013	2.221	2.614
Outing flannel, 27 to 28 inch.....	Yard.	.....	.....	.....	.....	.....	.379	.104	.123	.190	.371	.335	.410
Flannel, white, wool, 27-inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.750	.688	.868	1.125
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	.....	.....	.....	5.950	.....	.....	3.980	5.842	5.790	5.992
Scranton, Pa.													
Calico, 24 to 25 inch.....	Yard.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Percalé.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gingham, apron, 27 to 28 inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gingham, dress, 27-inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gingham, dress, 32-inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Muslin, bleached.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sheeting, bleached, 9-4.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sheets, bleached, 81 by 90.....	Each.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Outing flannel, 27 to 28 inch.....	Yard.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flannel, white, wool, 27-inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seattle, Wash.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.070	\$ 0.090	\$ 0.150	\$ 0.250	\$ 0.200	\$ 0.250	\$ 0.063	\$ 0.078	\$ 0.125	\$ 0.233	\$ 0.238	\$ 0.230
Percalé.....	do.	.150	.180	.250	.456	.430	.470	.119	.150	.....	.400	.366	.349
Gingham, apron, 27 to 28 inch.....	do.	.082	.100	.190	.300	.250	.330	.083	.100	.165	.283	.257	.280
Gingham, dress, 27-inch.....	do.	.121	.140	.219	.383	.329	.439	.120	.131	.207	.368	.349	.354
Gingham, dress, 32-inch.....	do.	.....	.....	.250	.510	.600	.750	.....	.....	.....	.529	.475	.493
Muslin, bleached.....	do.	.100	.129	.209	.344	.394	.351	.104	.127	.190	.316	.322	.322
Sheeting, bleached, 9-4.....	do.	.340	.426	.626	.900	1.080	1.119	.315	.365	.520	.778	.829	.966
Sheets, bleached, 81 by 90.....	Each.	.900	1.180	1.538	2.319	2.827	2.895	.823	1.020	1.625	1.803	2.095	2.526
Outing flannel, 27 to 28 inch.....	Yard.	.117	.142	.214	.390	.370	.435	.107	.120	.173	.341	.329	.307
Flannel, white, wool, 27-inch.....	do.	.....	.....	.838	1.083	1.000	1.575	.....	.....	.675	.....	.....	.750
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	3.800	5.890	5.440	5.825	.....	.....	3.750	5.483	5.495	5.583
Springfield, Ill.													
Calico, 24 to 25 inch.....	Yard.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Percalé.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gingham, apron, 27 to 28 inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gingham, dress, 27-inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gingham, dress, 32-inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Muslin, bleached.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sheeting, bleached, 9-4.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sheets, bleached, 81 by 90.....	Each.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Outing flannel, 27 to 28 inch.....	Yard.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flannel, white, wool, 27-inch.....	do.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington, D. C.													
Calico, 24 to 25 inch.....	Yard.	\$ 0.071	\$ 0.084	\$ 0.130	\$ 0.198	\$ 0.250	\$ 0.300	.....	.....	.....	.....	.....	.....
Percalé.....	do.	.125	.158	.217	.420	.478	.486	.....	.....	.....	.....	.....	.....
Gingham, apron, 27 to 28 inch.....	do.	.078	.103	.192	.281	.297	.257	.....	.....	.....	.....	.....	.....
Gingham, dress, 27-inch.....	do.	.125	.135	.257	.390	.419	.439	.....	.....	.....	.....	.....	.....
Gingham, dress, 32-inch.....	do.	.150	.155	.270	.510	.572	.674	.....	.....	.....	.....	.....	.....
Muslin, bleached.....	do.	.108	.131	.219	.346	.365	.339	.....	.....	.....	.....	.....	.....
Sheeting, bleached, 9-4.....	do.	.337	.403	.601	.813	.930	1.010	.....	.....	.....	.....	.....	.....
Sheets, bleached, 81 by 90.....	Each.	.833	1.003	1.563	2.144	2.348	2.538	.....	.....	.....	.....	.....	.....
Outing flannel, 27 to 28 inch.....	Yard.	.124	.131	.198	.398	.348	.404	.....	.....	.....	.....	.....	.....
Flannel, white, wool, 27-inch.....	do.	.....	.....	.813	1.195	1.250	1.224	.....	.....	.....	.....	.....	.....
Blankets, cotton, 66 by 80.....	Pair.	.....	.....	4.250	5.556	6.408	6.275	.....	.....	.....	.....	.....	.....

The following table shows for the United States average retail prices of specified articles of dry goods on October 15 of each year, 1915 to 1920.

AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF DRY GOODS FOR THE UNITED STATES ON OCT. 15 OF EACH YEAR, 1915 TO 1920.

Article.	Unit.	Average retail price on Oct. 15—					
		1915	1916	1917	1918	1919	1920
Calico, 24 to 25 inch.....	Yard..	\$0.066	\$0.082	\$0.127	\$0.238	\$0.216	\$0.222
Percale.....	do..	.128	.148	.222	.394	.409	.434
Gingham, apron, 27 to 28 inch.....	do..	.081	.098	.163	.290	.276	.269
Gingham, dress, 27-inch.....	do..	.120	.136	.218	.358	.362	.395
Gingham, dress, 32-inch.....	do..	.176	.202	.280	.543	.581	.663
Muslin, bleached.....	do..	.109	.129	.207	.344	.372	.345
Sheeting, bleached, 9-4.....	do..	.320	.394	.553	.829	.907	1.030
Sheets, bleached, 81 by 90 inches.....	Each..	.839	1.028	1.438	2.081	2.266	2.554
Outing flannel, 27 to 28 inch.....	Yard..	.115	.132	.193	.378	.349	.390
Flannel, white, wool, 27-inch.....	do..			.875	1.002	1.035	1.208
Blankets, cotton, 66 by 80 inches.....	Pair..			3.643	5.884	6.108	6.425

Index Numbers of Wholesale Prices in the United States.

CONTINUED recession in the wholesale price movement throughout the country is shown for October by information collected by the Bureau of Labor Statistics of the United States Department of Labor. The decline in the general price level from September to October, as measured by the Bureau's weighted index number, in which each commodity has an influence proportionate to its importance in the country's markets, was 7 per cent.

Farm products and foods again showed substantial price declines, the decrease for farm products being $13\frac{1}{2}$ per cent and for foods $8\frac{1}{2}$ per cent below the September level. Cloths and clothing followed next in order, with a drop of $7\frac{1}{2}$ per cent from the level of the previous month. Metals and miscellaneous commodities, the latter group including such important articles as bran, mill-feed middlings, cotton-seed meal and oil, rubber, manila hemp, wrapping paper, tankage, and wood pulp, each decreased more than 4 per cent. The decline in chemicals and drugs was approximately $2\frac{3}{4}$ per cent and in building materials about $1\frac{1}{2}$ per cent.

Fuel and lighting materials, which had been steadily increasing in price for several months, showed a slight drop from the level of September. No change in the general level was registered for the group of house-furnishing goods.

Of the 325 commodities or price quotations included in the comparison for September and October, 188 showed a decrease and only 37 showed an increase. In 100 cases no change in price was recorded. Of these, a majority belong in the groups designated as cloths and clothing, building materials, and chemicals.

Some of the more important price changes occurring between September and October, as measured by average prices in each month, are as follows:

IMPORTANT ARTICLES INCREASING OR DECREASING IN AVERAGE PRICE IN OCTOBER AS COMPARED WITH SEPTEMBER, 1920, BY GROUPS OF COMMODITIES.

Increases.

Commodity.	Per cent.	Commodity.	Per cent.	Commodity.	Per cent.
<i>Food, etc.</i>		<i>Food, etc.—Concluded.</i>		<i>Building materials.</i>	
Butter, creamery, extra:		Bacon, Chicago.....	7.6	Brick, building, New York.....	4.7
New York.....	1.9	Molasses, New Orleans....	9.1	Lime, New York.....	4.3
Philadelphia.....	1.8				
St. Louis.....	3.4	<i>Cloths and clothing.</i>		<i>Miscellaneous.</i>	
Eggs:		Blankets, all wool, factory..	2.0	Lubricating oil:	
Boston.....	13.2			Paraffin, 903°, New York.....	1.5
Chicago.....	8.2	<i>Fuel and lighting.</i>		Paper, news print, rolls,	
Cincinnati.....	8.8	Petroleum, 150° fire test,		contract, f. o. b. mills....	9.6
New Orleans.....	10.4	New York.....	5.5	Sisal, Mexican, New York.....	2.4
New York.....	11.8				
Philadelphia.....	11.2	<i>Metals and metal products.</i>			
San Francisco.....	4.7	Bar iron, Philadelphia....	4.8		
Lemons, Chicago.....	26.3				
Oranges, Chicago.....	5.0				

Decreases.

<i>Farm products.</i>		<i>Food, etc.—Continued.</i>		<i>Cloths and clothing—Con.</i>	
Cotton:		Cheese:		Sheeting:	
New Orleans.....	22.8	Chicago.....	6.6	Brown, 4-4, Pepperell,	
New York.....	24.8	New York.....	5.2	New York.....	15.5
Flaxseed, Minneapolis....	17.8	San Francisco.....	14.7	Ware Shoals, New York.....	13.0
Barley, Chicago.....	8.3	Coffee, Rio, New York....	7.3	Muslin, bleached, factory:	
Corn, No. 2, Chicago.....	32.5	Flour, wheat:		36-inch, Lonsdale.....	21.2
Oats, cash, Chicago.....	9.3	Winter, patent, Kansas		4-4, Wamsutta.....	9.5
Rye, No. 2, Chicago.....	12.8	City.....	11.7	Cotton yarn:	
Wheat:		Standard, patent, Min-		Carded, 10/1, Boston....	20.0
No. 1, northern spring,		neapolis.....	11.0	Carded, 22/1, Boston....	23.8
Chicago.....	12.9	Corn meal, white:		Twisted, 20/2, Boston....	23.4
No. 2, hard winter,		Decatur, Ill.....	24.9	Twisted, 40/2, Boston....	25.9
Kansas City.....	15.2	Philadelphia.....	20.9	Leather, Boston:	
No. 1, northern spring,		Meat:		Chrome calf.....	6.2
Minneapolis.....	15.4	Beef, Chicago.....	3.1	Glazed kid, black.....	3.1
No. 1, hard white, Port-		Lamb, Chicago.....	7.5	Sole, hemlock, No. 1....	3.9
land, Oreg.....	7.9	Poultry, iced, Chicago....	15.3	Sole, oak.....	8.6
Hay:		Oleomargarine, Chicago....	3.3	Raw silk, Japan, New	
Alfalfa, No. 1, Kansas		Rice: Blue Rose, New		York.....	5.4
City.....	12.6	Orleans.....	14.9	Suitings, New York:	
Timothy, No. 1, Chicago..	7.0	Sugar:		Clay worsted, 12 oz.....	8.3
Hides:		Raw, New York.....	21.9	Middlesex, wool-dyed	
Calfskins, No. 1, Chicago..	19.7	Granulated, New York....	24.4	blue.....	3.8
Brazilian goatskins, New		Vegetables, fresh:		Underwear: Union suits,	
York.....	8.8	Onions, Chicago.....	21.4	33 per cent worsted,	
Packers, heavy native		Potatoes, white, Chicago	23.4	New York.....	24.0
steers, Chicago.....	10.2			Wool, Ohio, unwashed,	
Hops, prime to choice:		<i>Cloths and clothing.</i>		Boston:	
New York.....	14.9	Boots and shoes, factory:		Fine clothing.....	10.0
Portland, Oreg.....	27.0	Children's, gun metal....	6.1	Fine delaine.....	4.8
Live stock:		Men's, vici calf.....	12.7	Half blood.....	10.3
Steers, Chicago.....	3.7	Misses, vici, button....	4.1	1 and 3 grades.....	13.0
Lambs, Chicago.....	6.4	Women's, McKay, sewed	2.7	Worsted yarns, Philadel-	
Hogs, light, Chicago.....	13.4	Youth's, gun metal.....	3.6	phia:	
Sheep, ewes, Chicago.....	5.9	Blankets, cotton, New		2-40's, half blood.....	8.3
Peanuts, No. 1, Norfolk...	15.2	York.....	25.9	2-50's, fine domestic....	7.1
Poultry, live:		Drilling, brown: Mass. D.		<i>Fuel and lighting.</i>	
Fowls, Chicago.....	23.6	Standard, New York....	10.5	Alcohol, denatured, New	
Fowls, New York.....	24.2	Cotton flannel, unbleached,		York.....	4.3
<i>Food, etc.</i>		New York.....	33.1	Coal, bituminous:	
Beans, medium, choice,		Hosiery:		Screenings, Chicago.....	3.9
New York.....	11.6	Men's, cotton, New York	8.2	Run of mine, St. Louis..	1.4
Butter, creamery, extra,		Women's, silk mercer-		Coke, Connelville, fur-	
San Francisco.....	11.1	ized, New York.....	22.1	nace.....	6.5
Canned goods: Tomatoes,		Print cloths, Boston.....	18.0	Petroleum, crude:	
New York.....	14.3			California.....	1.0

IMPORTANT ARTICLES INCREASING OR DECREASING IN AVERAGE PRICE IN OCTOBER AS COMPARED WITH SEPTEMBER, 1920, BY GROUPS OF COMMODITIES—Concluded.

Decreases—Concluded.

Commodity.	Per cent.	Commodity.	Per cent.	Commodity.	Per cent.
<i>Metals and metal products.</i>		<i>Building materials.</i>		<i>Miscellaneous.</i>	
Copper, ingot, New York.	10.4	Cement, Portland, New York.	1.6	Bran, Minneapolis.	19.1
Copper, wire, f. o. b. mills.	10.3	Maple, 4-4, New York.	2.3	Cottonseed meal, New York.	10.3
Lead, pig, New York.	10.4	Pine, yellow, flooring, New York.	3.2	Cottonseed oil, New York.	18.6
Lead pipe, New York.	11.5	Linseed oil, raw, New York.	11.4	Paper, wrapping, New York.	4.4
Pig iron:		Turpentine, New York.	16.5	Rubber, New York.	14.3
Basic, valley.	7.8	Douglas fir, No. 1, mill.	3.9	Wood pulp, sulphite, domestic, unbleached, New York.	1.5
Bessemer, Pittsburgh.	2.5	Douglas fir, No. 2, mill.	10.9	Hemp, manila, New York.	6.6
Foundry, No. 2, northern, Pittsburgh.	5.4	Shingles, red cedar, mill.	17.0	Mill feed, middlings, Minneapolis.	32.6
Silver, bar, fine, New York.	9.8	<i>Chemicals and drugs.</i>		Tankage, 9 and 20 per cent, Chicago.	8.4
Steel billets, Bessemer, Pittsburgh.	6.4	Alcohol, wood, New York.	10.2	Coconut oil, crude, Pacific coast.	3.4
Steel plates, tank, Pittsburgh.	4.9	Copper sulphate, New York.	8.5	Soya bean oil, crude, New York.	9.7
Structural steel, Chicago.	1.6	Glycerine, New York.	6.0		
Tin, pig, New York.	8.4	Quinine, New York.	6.7		
Tin plate, Pittsburgh.	4.2	Caustic soda, New York.	6.5		
Wire, fence, Pittsburgh.	10.0	Nitrate of soda, New York.	11.9		
Zinc, pig, New York.	2.3	Soda ash, light, New York.	5.5		

Comparing prices in October with those of a year ago, as measured by changes in the index numbers, it is seen that foods have declined $3\frac{1}{2}$ per cent, cloths and clothing nearly 18 per cent, and farm products nearly 21 per cent. In all other groups increases have taken place, ranging from 4 per cent in the miscellaneous commodities group to nearly 56 per cent in the group of fuel and lighting materials. In building materials the increase has been $35\frac{1}{2}$ per cent and in house furnishings $40\frac{1}{2}$ per cent. All commodities, taken in the aggregate, increased less than 1 per cent in price in the year.

INDEX NUMBERS OF WHOLESALE PRICES IN SPECIFIED YEARS AND MONTHS 1913,
TO OCTOBER, 1920, BY GROUPS OF COMMODITIES.

[1913=100.]

Year and month.	Farm prod- ucts.	Food, etc.	Cloths and cloth- ing.	Fuel and light- ing.	Metals and metal prod- ucts.	Build- ing mate- rials.	Chem- icals and drugs.	House fur- nishing goods.	Miscel- lane- ous.	All com- modi- ties.
1913.	100	100	100	100	100	100	100	100	100	100
January.....	97	99	100	103	107	100	101	100	100	100
April.....	97	96	100	98	102	101	101	100	98	98
July.....	101	102	100	99	98	101	99	100	101	100
October.....	103	102	100	100	99	98	100	100	100	101
1914.	103	103	98	96	87	97	101	99	99	100
January.....	101	102	98	99	92	98	100	99	99	100
April.....	103	95	99	98	91	99	100	99	101	98
July.....	104	104	99	95	85	97	99	99	97	100
October.....	103	107	97	93	83	96	105	99	96	99
1915.	105	104	100	93	97	94	114	99	99	101
January.....	102	106	96	93	83	94	103	99	100	99
April.....	107	105	99	89	91	94	102	99	99	100
July.....	108	104	99	90	102	93	108	99	98	101
October.....	105	103	103	96	100	93	124	99	99	101
1916.	122	126	128	119	148	101	159	115	120	124
January.....	108	113	110	105	126	99	150	105	107	110
April.....	114	117	119	108	147	101	172	108	110	117
July.....	118	121	126	108	145	99	156	121	120	119
October.....	136	140	138	133	151	101	150	124	132	134
1917.	189	176	181	175	208	124	198	144	155	176
January.....	148	150	161	176	183	106	159	132	138	151
April.....	181	182	169	184	208	114	170	139	149	172
July.....	199	181	187	192	257	132	198	152	153	186
October.....	208	183	193	146	182	114	252	152	163	181
1918.	220	189	239	163	181	151	221	196	193	196
January.....	207	187	211	157	174	136	232	161	178	185
February.....	208	186	216	157	176	138	232	161	181	186
March.....	212	177	223	158	176	144	232	165	184	187
April.....	217	178	232	157	177	146	229	172	191	190
May.....	214	177	237	160	178	148	223	173	194	190
June.....	217	179	245	159	178	150	219	198	196	193
July.....	224	184	249	166	184	154	216	199	190	198
August.....	230	191	252	166	185	157	222	221	191	202
September.....	237	199	255	167	184	159	220	226	194	207
October.....	224	201	257	167	187	158	218	226	196	204
November.....	221	206	256	171	188	164	215	226	203	206
December.....	222	210	250	171	184	164	195	227	204	206
1919.	234	210	261	173	161	192	179	236	217	212
January.....	222	207	234	170	172	161	191	218	212	203
February.....	218	196	223	169	168	163	185	218	208	197
March.....	228	203	216	168	162	165	183	218	217	201
April.....	235	211	217	167	152	162	178	217	216	203
May.....	240	214	228	167	152	164	179	217	213	207
June.....	231	204	258	170	154	175	174	233	212	207
July.....	246	216	282	171	158	186	171	245	221	218
August.....	243	227	304	175	165	208	172	259	225	226
September.....	226	211	306	181	160	227	173	262	217	220
October.....	230	211	313	181	161	231	174	264	220	223
November.....	240	219	325	179	164	236	176	299	220	230
December.....	244	234	335	181	169	253	179	303	229	238
1920:										
January.....	246	253	350	184	177	268	189	324	227	248
February.....	237	244	356	187	189	300	197	329	227	249
March.....	239	246	356	192	192	324	205	329	230	253
April.....	246	270	353	213	195	341	212	331	238	265
May.....	244	287	347	235	193	341	215	329	246	272
June.....	243	279	335	246	190	337	218	362	247	269
July.....	236	268	317	252	191	333	217	362	243	262
August.....	222	235	299	268	193	328	216	363	240	250
September.....	210	223	278	284	192	318	222	371	239	242
October ¹	182	204	257	282	184	313	216	371	229	225

¹ Preliminary.

Price Changes, Wholesale and Retail, of Important Food Articles in Selected Cities.

CONTINUING information published in previous issues of the MONTHLY LABOR REVIEW, the trend of wholesale and retail prices since 1913 for a number of important food products is shown herewith. Exact comparison of wholesale with retail prices is not attempted in the tables. Some food products—fresh meats, for example—are not sold by the retailer in the same form in which they leave the wholesaler, hence strictly comparable prices are not obtainable. It was found impracticable also to obtain both wholesale and retail prices for the same date, the retail prices being those prevailing on the 15th of the month, while the wholesale prices are for a variable date, usually several days prior to the 15th. The figures in the table are therefore to be considered as merely indicative of price variations in the retail as compared with the wholesale markets.

To assist in comparing the fluctuations at wholesale and at retail, the differential between the two series of quotations at successive dates is given. It should not be assumed, however, that this differential in any case represents the margin of profit to the retailer, since, in addition to a possible difference of grade between the articles shown at wholesale and retail, the various items of handling cost to both the wholesaler and retailer are included in the figure.

WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES.

[The initials W=wholesale, R=retail. The wholesale price is the mean of the high and low quotation on the date selected, as published in leading trade journals. The retail price is the average of prices reported to the Bureau of Labor Statistics by dealers.]

Article and city.	Unit.	1913: Av- erage for year.	July—						1920					
			1914	1915	1916	1917	1918	1919	Jan.	Apr.	July.	Aug.	Sept.	Oct.
Beef, Chicago:														
Steer loin ends (hip).....W	Lb.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....R	Lb.	16.8	17.5	16.0	20.5	19.0	34.0	27.0	32.0	32.0	36.0	36.0	38.0	40.0
Price differential.....		23.2	26.0	25.8	28.1	30.2	37.7	39.3	37.2	40.9	47.8	47.4	48.4	47.3
		6.4	8.5	9.8	7.6	11.2	3.7	12.3	5.2	8.9	11.8	11.4	10.4	7.3
Beef, Chicago:														
Steer rounds, No. 2...W	Lb.	13.1	14.5	14.3	14.5	17.0	25.0	22.0	20.0	19.0	29.0	26.0	24.0	20.0
Round steak.....R	Lb.	20.2	23.3	22.8	24.1	26.6	35.0	35.5	32.0	34.6	40.9	39.8	40.0	39.0
Price differential.....		7.1	8.8	8.5	9.6	9.6	10.0	13.5	12.0	15.6	11.9	13.8	16.0	19.0
Beef, Chicago:														
Steer ribs, No. 2...W	Lb.	15.7	16.5	14.5	17.5	20.0	28.0	24.0	35.0	27.0	35.0	30.0	30.0	35.0
Rib roast.....R	Lb.	19.5	21.2	21.3	22.9	24.6	31.8	31.9	30.1	34.0	35.9	35.9	35.8	35.0
Price differential.....		3.8	4.7	6.8	5.4	4.6	3.8	7.9		7.0	.9	5.9	5.8	0.0
Beef, New York:														
No. 2 loins, city....W	Lb.	15.8	18.3	17.0	20.0	19.0	28.0	28.5	37.0	34.0	43.0	43.0	40.5	41.0
Sirloin steak.....R	Lb.	25.9	27.4	28.2	29.4	33.7	43.9	44.4	43.3	45.8	52.9	51.4	51.0	50.1
Price differential.....		10.1	9.1	11.2	9.4	14.7	15.9	15.9	6.3	11.8	9.9	8.4	10.5	9.1
Beef, New York:														
No. 2 rounds, city...W	Lb.	12.1	13.5	13.5	14.5	17.5	28.0	22.0	21.0	20.5	30.0	25.0	25.0	23.0
Round steak.....R	Lb.	24.9	27.0	27.1	28.9	33.7	46.3	46.2	44.6	46.4	52.9	51.7	51.2	50.3
Price differential.....		12.8	13.5	13.6	14.4	16.2	18.3	24.2	23.6	25.9	22.9	26.7	26.2	27.3
Beef, New York:														
No. 2 ribs, city.....W	Lb.	15.1	16.5	16.0	18.0	19.0	28.0	27.5	31.0	27.0	36.0	24.0	32.0	35.0
Rib roast.....R	Lb.	21.8	22.5	22.7	24.3	27.9	37.5	38.6	38.4	40.6	44.4	43.0	42.4	41.7
Price differential.....		6.7	6.0	6.7	6.3	8.9	9.5	11.1	7.4	13.6	8.4	9.0	10.4	6.7
Pork, Chicago:														
Loins.....W	Lb.	14.9	16.5	15.0	16.5	25.0	29.0	37.0	25.0	32.0	35.0	36.0	40.0	38.0
Chops.....R	Lb.	19.0	20.4	20.1	21.7	29.2	35.5	41.7	32.4	43.1	42.6	43.6	48.1	46.0
Price differential.....		4.1	3.9	5.1	5.2	4.2	6.5	4.7	7.4	11.1	7.6	7.6	8.1	8.0

¹ Price is for different quality of beef from that quoted at wholesale.

WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES—Continued.

Article and city.	Unit.	1913: Average for year.	July—							1920					
			1914	1915	1916	1917	1918	1919		Jan.	Apr.	July.	Aug.	Sept.	Oct.
Pork, New York:															
Loin, western.....W..	Lb..	15.2	16.3	15.3	16.5	23.5	30.5	37.0	29.0	29.0	29.5	31.5	34.5	40.5	
Chops.....R..	Lb..	21.7	23.0	21.7	23.9	32.6	40.6	47.5	39.9	44.8	44.3	45.9	49.9	52.3	
Price differential.....		6.5	6.7	6.4	7.4	9.1	10.1	10.5	10.9	15.8	14.8	14.4	15.4	11.8	
Bacon, Chicago:															
Short clear sides...W..	Lb..	12.7	13.9	11.3	15.9	24.7	27.4	33.1	21.6	21.6	20.6	20.3	19.6	21.1	
Sliced.....R..	Lb..	29.4	31.8	31.5	32.8	43.9	54.7	61.5	53.1	56.4	60.1	60.3	60.1	59.4	
Price differential.....		16.7	17.9	20.2	16.9	19.2	27.3	28.4	31.5	34.8	39.5	40.0	40.5	38.3	
Ham, Chicago:															
Smoked.....W..	Lb..	16.6	17.5	16.3	19.0	24.3	30.1	38.3	28.9	32.5	37.5	37.5	36.1	35.8	
Smoked, sliced.....R..	Lb..	26.6	33.8	32.8	34.9	41.4	49.1	58.8	51.8	55.6	61.3	61.9	62.3	61.9	
Price differential.....		10.0	16.3	16.5	15.9	17.1	19.0	20.5	22.9	23.1	23.8	24.4	26.2	26.1	
Lard, New York:															
Prime, contract...W..	Lb..	11.0	10.4	8.0	13.3	20.1	26.2	35.8	24.5	19.3	19.6	19.1	20.5	20.6	
Pure, tub.....R..	Lb..	16.0	15.6	15.1	16.8	27.4	32.2	42.5	33.8	30.4	29.2	28.1	28.1	30.1	
Price differential.....		5.0	5.2	7.1	3.5	7.3	6.0	6.7	9.3	11.1	9.6	9.0	7.6	9.5	
Lamb, Chicago:															
Dressed, round...W..	Lb..	14.9	17.0	19.0	19.0	26.0	31.0	29.0	29.0	33.0	31.0	27.0	26.0	24.0	
Leg of, yearling...R..	Lb..	19.8	21.9	20.8	23.1	28.7	35.7	36.2	37.0	41.7	41.5	39.8	40.4	38.7	
Price differential.....		4.9	4.9	1.8	4.1	2.7	4.7	7.2	8.0	8.7	10.5	12.8	14.4	14.7	
Poultry, New York:															
Dressed fowls.....W..	Lb..	18.2	18.8	17.5	21.5	24.8	36.0	34.5	35.3	39.0	39.0	39.0	39.0	39.0	
Dressed hens.....R..	Lb..	21.4	22.0	21.9	25.6	28.7	41.0	41.5	40.3	45.0	47.0	46.6	46.6	46.5	
Price differential.....		3.2	3.2	4.4	4.1	3.9	5.0	7.0	5.0	6.0	8.0	7.6	7.6	7.5	
Butter, Chicago:															
Creamery, extra...W..	Lb..	31.0	26.5	26.5	27.5	37.5	42.5	52.0	62.0	60.0	55.5	54.0	56.0	58.0	
Creamery, extra...R..	Lb..	36.2	31.2	32.2	33.5	43.2	48.0	57.1	69.0	71.0	62.9	61.4	63.4	63.3	
Price differential.....		5.2	4.7	5.7	6.0	5.7	5.5	5.1	7.0	11.0	7.4	7.4	7.4	5.3	
Butter, New York:															
Creamery, extra...W..	Lb..	32.3	28.0	27.0	28.5	39.5	44.4	51.0	63.8	75.0	57.4	55.5	58.0	61.0	
Creamery, extra...R..	Lb..	38.2	32.8	33.6	34.6	45.3	51.4	61.3	75.2	80.0	66.9	64.8	67.6	69.9	
Price differential.....		5.9	4.8	6.6	6.1	5.8	7.0	10.3	11.4	5.0	9.5	9.3	9.6	8.9	
Butter, San Francisco:															
Creamery, extra...W..	Lb..	31.7	24.5	26.5	25.5	38.5	50.0	56.5	61.0	58.5	59.0	61.0	67.5	59.5	
Creamery, extra...R..	Lb..	38.8	32.9	33.8	33.3	45.5	56.6	64.7	70.9	64.2	68.0	69.0	77.1	69.6	
Price differential.....		7.1	8.4	7.3	7.8	7.0	6.6	8.2	9.9	5.7	9.0	8.0	9.6	10.1	
Cheese, Chicago:															
Whole milk.....W..	Lb..	14.2	13.3	14.5	14.5	21.6	22.7	30.9	30.4	27.9	24.9	24.6	26.1	24.3	
Full cream.....R..	Lb..			22.9	24.2	33.9	34.5	44.1	44.9	44.3	43.4	42.2	41.7	41.3	
Price differential.....				8.4	9.7	12.3	11.8	13.2	14.5	16.4	18.5	17.6	15.6	17.0	
Cheese, New York:															
Whole milk, State.W..	Lb..	15.4	14.4	14.6	15.1	23.8	23.9	31.5	31.4	28.5	26.5	26.0	27.5	27.8	
Full cream.....R..	Lb..			22.9	22.8	32.8	33.2	42.8	43.3	42.7	41.7	41.3	41.8	41.6	
Price differential.....				8.3	7.7	9.0	9.3	11.3	11.9	14.2	15.2	15.3	14.3	13.8	
Cheese, San Francisco:															
Fancy.....W..	Lb..	15.9	12.5	11.5	13.5	20.0	26.0	32.0	32.5	25.5	33.0	32.5	35.0	31.0	
Full cream.....R..	Lb..			20.0	22.9	29.7	32.3	41.2	43.2	40.6	42.5	42.8	42.9	43.2	
Price differential.....				8.5	9.4	9.7	6.3	9.2	10.7	15.1	9.5	10.3	7.9	12.2	
Milk, Chicago:															
Fresh.....W..	Qt..	3.8	3.6	3.7	3.6	4.7	5.3	6.8	8.1	6.4	7.2	8.2	8.4	8.4	
Fresh, bottled ².....R..	Qt..	8.0	8.0	8.0	8.1	10.0	12.0	14.0	15.0	14.0	15.0	16.0	16.0	16.0	
Price differential.....		4.2	4.4	4.3	4.5	5.3	6.7	7.2	6.9	7.6	7.8	7.8	7.6	7.6	
Milk, New York:															
Fresh.....W..	Qt..	3.5	3.0	3.0	3.1	5.0	5.4	7.1	8.5	6.1	7.0	7.8	8.4	8.4	
Fresh, bottled ².....R..	Qt..	9.0	9.0	9.0	9.0	11.4	12.7	16.0	18.0	15.0	16.0	17.0	18.0	18.0	
Price differential.....		5.5	6.0	6.0	5.9	6.4	7.3	8.9	9.5	8.9	9.0	9.2	9.6	9.6	
Milk, San Francisco:															
Fresh.....W..	Qt..	3.9	3.9	3.8	3.8	4.3	5.9	7.4	8.4	8.4	8.4	9.4	9.4	9.4	
Fresh, bottled.....R..	Qt..	10.0	10.0	10.0	10.0	10.0	12.1	14.0	15.8	15.8	16.0	16.8	16.8	16.8	
Price differential.....		6.1	6.1	6.2	6.2	5.7	6.2	6.6	7.4	7.4	7.6	7.4	7.4	7.4	
Eggs, Chicago:															
Fresh, firsts.....W..	Doz.	22.6	18.8	16.8	21.8	31.0	36.5	42.0	68.5	40.0	41.5	45.8	51.5	58.0	
Strictly fresh.....R..	Doz.	29.2	26.1	24.8	29.6	40.6	45.7	53.2	77.8	51.0	53.4	59.5	64.9	71.5	
Price differential.....		6.6	7.3	8.0	7.8	9.6	9.2	11.2	9.3	11.0	11.9	13.7	13.4	13.5	
Eggs, New York:															
Fresh, firsts.....W..	Doz.	24.9	21.5	20.0	24.1	35.0	40.0	44.5	77.5	46.3	46.5	51.0	56.0	63.5	
Strictly fresh.....R..	Doz.	39.7	35.3	32.6	37.2	47.7	57.3	66.4	95.8	62.9	66.8	71.9	79.0	87.4	
Price differential.....		14.8	13.8	12.6	13.1	12.7	17.3	21.9	18.3	16.6	20.3	20.9	23.0	23.9	
Eggs, San Francisco:															
Fresh.....W..	Doz.	26.8	23.0	22.0	24.0	32.0	44.0	45.0	54.5	38.5	48.0	51.0	65.0	67.0	
Strictly fresh.....R..	Doz.	37.3	33.8	31.0	33.3	39.2	51.4	56.6	68.9	47.3	60.6	64.0	76.6	90.6	
Price differential.....		10.5	10.8	9.0	9.3	7.2	7.4	11.6	14.4	8.8	12.6	13.0	11.6	23.6	
Meal, corn, Chicago:															
Fine.....W..	Lb..	1.4	1.6		1.9	4.5	5.4	4.6	3.7	4.0	4.3	3.9	4.0	2.8	
Fine.....R..	Lb..	2.9	2.8	3.1	3.1	5.8	6.8	6.1	6.6	7.1	7.2	7.1	7.1	6.6	
Price differential.....		1.5	1.2		1.2	1.3	1.4	1.5	2.9	3.1	2.9	3.2	3.1	3.8	

² Delivered.

[1185]

WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES—Concluded.

Article and city.	Unit.	1913: Av- erage for year.	July—						1920					
			1914	1915	1916	1917	1918	1919	Jan.	Apr.	July.	Aug.	Sept.	Oct.
Beans, New York:														
Medium, choice.....W.	Lb.	Cts. 4.0	Cts. 4.0	Cts. 5.8	Cts. 9.8	Cts. 15.4	Cts. 11.9	Cts. 7.5	Cts. 7.9	Cts. 7.5	Cts. 8.3	Cts. 8.0	Cts. 7.5	Cts. 7.0
Navy, white.....R.	Lb.			Cts. 8.1	Cts. 11.3	Cts. 18.8	Cts. 17.5	Cts. 12.2	Cts. 12.5	Cts. 12.4	Cts. 12.5	Cts. 12.5	Cts. 12.2	Cts. 11.2
Price differential.....				Cts. 2.3	Cts. 1.5	Cts. 3.4	Cts. 5.6	Cts. 4.7	Cts. 4.6	Cts. 4.9	Cts. 4.2	Cts. 4.5	Cts. 4.7	Cts. 4.2
Potatoes, Chicago:														
White ³.....W.	Lb.	Cts. 1.0	Cts. 2.4	Cts. .7	Cts. 1.6	Cts. 4.4	Cts. 1.5	Cts. 1.4	Cts. 4.3	Cts. 7.0	Cts. 7.4	Cts. 3.2	Cts. 2.7	Cts. 1.8
White.....R.	Lb.	Cts. 1.5	Cts. 2.7	Cts. 1.2	Cts. 2.3	Cts. 5.0	Cts. 3.7	Cts. 5.0	Cts. 5.2	Cts. 8.8	Cts. 9.8	Cts. 5.1	Cts. 3.8	Cts. 3.0
Price differential.....		Cts. .5	Cts. .3	Cts. .5	Cts. .7	Cts. .6	Cts. 2.2	Cts. 3.6	Cts. .9	Cts. 1.8	Cts. 2.4	Cts. 1.9	Cts. 1.1	Cts. 1.2
Rice, New Orleans:														
Head.....W.	Lb.	Cts. 5.0	Cts. 5.4	Cts. 4.9	Cts. 4.6	Cts. 7.1	Cts. 9.3	Cts. 10.5	Cts. 12.6	Cts. 12.3	Cts. 12.5	Cts. 9.5	Cts. 9.4	Cts. 7.8
Head.....R.	Lb.			Cts. 7.5	Cts. 7.4	Cts. 10.1	Cts. 11.9	Cts. 14.2	Cts. 16.0	Cts. 16.4	Cts. 15.6	Cts. 14.4	Cts. 13.4	Cts. 11.6
Price differential.....				Cts. 2.6	Cts. 2.8	Cts. 3.0	Cts. 2.6	Cts. 3.7	Cts. 3.4	Cts. 4.1	Cts. 3.1	Cts. 4.9	Cts. 4.0	Cts. 3.8
Sugar, New York:														
Granulated.....W.	Lb.	Cts. 4.3	Cts. 4.2	Cts. 5.9	Cts. 7.5	Cts. 7.4	Cts. 7.4	Cts. 8.8	Cts. 15.7	Cts. 18.1	Cts. 19.9	Cts. 16.8	Cts. 14.2	Cts. 10.8
Granulated.....R.	Lb.	Cts. 4.9	Cts. 4.6	Cts. 6.3	Cts. 7.9	Cts. 8.4	Cts. 8.8	Cts. 10.0	Cts. 17.3	Cts. 19.1	Cts. 25.2	Cts. 21.7	Cts. 17.3	Cts. 13.1
Price differential.....		Cts. .6	Cts. .4	Cts. .4	Cts. .4	Cts. 1.0	Cts. 1.4	Cts. 1.2	Cts. 1.6	Cts. 1.0	Cts. 5.3	Cts. 4.9	Cts. 3.1	Cts. 2.3

³ Good to choice.

RELATIVE WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN SELECTED CITIES.

[Average for 1913=100.]

Article and city.	Av- erage for 1913.	July—						1920					
		1914	1915	1916	1917	1918	1919	Jan.	Apr.	July.	Aug.	Sept.	Oct.
Beef, Chicago:													
Steer loin ends (hip).....W.	100	104	95	122	113	202	161	190	190	214	214	226	238
Sirloin steak.....R.	100	112	111	121	130	163	169	160	176	206	204	209	204
Beef, Chicago:													
Steer rounds, No. 2.....W.	100	111	109	111	130	191	168	153	145	221	198	183	153
Round steak.....R.	100	115	113	119	132	173	176	158	171	202	197	198	193
Beef, Chicago:													
Steer ribs, No. 2.....W.	100	105	92	111	127	178	153	223	172	223	191	191	223
Rib roast.....R.	100	109	109	117	126	163	164	154	174	184	184	184	179
Beef, New York:													
No. 2 loins, city.....W.	100	116	108	127	120	177	180	234	215	272	272	256	259
Sirloin steak.....R.	100	106	109	114	130	170	171	167	177	204	198	197	193
Beef, New York:													
No. 2 rounds, city.....W.	100	112	112	120	145	231	182	174	169	248	207	207	190
Round steak.....R.	100	108	109	116	135	186	186	179	186	212	208	206	202
Beef, New York:													
No. 2 ribs, city.....W.	100	109	106	119	126	185	182	205	179	238	225	212	232
Rib roast.....R.	100	103	104	111	128	172	177	176	186	204	197	195	191
Pork, Chicago:													
Loins.....W.	100	111	101	111	168	195	248	168	215	235	242	268	255
Chops.....R.	100	107	106	114	154	187	219	171	227	224	229	253	242
Pork, New York:													
Loins, western.....W.	100	107	101	109	155	201	243	191	191	194	207	227	266
Chops.....R.	100	106	100	110	150	187	219	184	206	204	212	230	241
Bacon, Chicago:													
Short clear sides.....W.	100	109	89	125	194	216	261	170	170	162	160	154	166
Sliced.....R.	100	108	107	112	149	186	209	181	192	204	205	204	202
Ham, Chicago:													
Smoked.....W.	100	105	98	114	146	181	231	174	196	226	226	217	216
Smoked, sliced.....R.	100	127	123	131	156	185	221	195	209	230	233	234	233
Lard, New York:													
Prime, contract.....W.	100	95	73	121	183	238	325	223	175	178	174	186	187
Pure, tub.....R.	100	98	94	105	171	201	266	211	190	183	176	176	188
Lamb, Chicago:													
Dressed, round.....W.	100	114	128	128	174	208	195	195	221	208	181	175	161
Leg of, yearling.....R.	100	111	105	117	145	180	183	187	211	210	201	204	195
Poultry, New York:													
Dressed fowls.....W.	100	103	96	118	136	198	190	194	214	214	214	214	214
Dressed hens.....R.	100	103	103	120	134	192	194	188	210	220	218	218	217
Butter, Chicago:													
Creamery, extra.....W.	100	85	85	89	121	137	168	200	194	179	174	181	187
Creamery, extra.....R.	100	86	89	93	119	133	158	191	196	174	170	175	175
Butter, New York:													
Creamery, extra.....W.	100	87	84	88	122	137	158	198	232	178	172	180	189
Creamery, extra.....R.	100	96	88	91	119	135	160	197	209	175	170	177	183

RELATIVE WHOLESALE AND RETAIL PRICES OF IMPORTANT FOOD ARTICLES IN
SELECTED CITIES—Concluded.
[Average for 1913=100.]

Article and city.	Average for 1913.	July—						1920					
		1914	1915	1916	1917	1918	1919	Jan.	Apr.	July.	Aug.	Sept.	Oct.
Butter, San Francisco:													
Creamery, extra.....W..	100	77	84	80	121	158	178	192	185	186	192	213	188
Creamery, extra.....R..	100	85	87	86	117	146	167	183	165	175	178	199	179
Milk, Chicago:													
Fresh.....W..	100	95	97	95	124	139	179	213	168	189	216	221	221
Fresh, bottled, delivered..R..	100	100	100	101	125	150	175	188	175	188	200	200	200
Milk, New York:													
Fresh.....W..	100	86	86	89	143	154	203	243	174	200	223	240	240
Fresh, bottled, delivered..R..	100	100	100	100	127	141	178	200	167	178	189	200	200
Milk, San Francisco:													
Fresh.....W..	100	100	97	97	110	151	190	215	215	215	241	241	241
Fresh, bottled.....R..	100	100	100	100	100	121	140	158	158	160	168	168	168
Eggs, Chicago:													
Fresh, firsts.....W..	100	83	74	96	137	162	186	303	177	184	203	228	257
Strictly fresh.....R..	100	89	85	101	139	157	182	266	175	183	204	222	245
Eggs, New York:													
Fresh, firsts.....W..	100	86	80	97	141	161	179	311	186	187	205	225	255
Strictly fresh.....R..	100	89	82	94	120	144	167	241	158	168	181	199	220
Eggs, San Francisco:													
Fresh.....W..	100	86	82	90	119	164	168	203	144	179	190	243	250
Strictly fresh.....R..	100	91	83	89	105	138	152	185	127	162	172	205	243
Meal, corn, Chicago:													
Fine.....W..	100	114	.....	136	321	386	329	264	286	307	279	286	200
Fine.....R..	100	97	107	107	200	234	210	228	245	248	245	245	228
Potatoes, Chicago:													
White, good to choice....W..	100	237	66	160	429	150	140	430	700	740	320	270	180
White.....R..	100	182	78	151	331	247	333	347	587	653	340	253	200
Sugar, New York:													
Granulated.....W..	100	98	137	174	172	172	205	365	421	463	391	330	251
Granulated.....R..	100	94	129	161	171	180	204	353	390	514	443	353	267

Wholesale Prices in the United States and Foreign Countries, 1913 to
September, 1920.

IN THE following table the more important index numbers of wholesale prices in the United States and several foreign countries as compiled by recognized authorities, have been reduced to a common base, in order that the trend of prices in the several countries may be directly compared. The results here shown have been obtained by merely shifting the base for each series of index numbers to the year 1913; i. e., by dividing the index for 1913 on the original base into the index for each year or month on that base. These results are therefore to be regarded only as approximations of the correct index numbers in the case of series constructed by averaging the relative prices of individual commodities.¹ This applies to the index numbers of the Department of Labor of Canada, the Statistique Générale of France, and the series for Italy constructed by Prof. Riccardo Bachi. The index numbers of the United States Bureau of Labor Statistics, the British Board of Trade, and the Census and Statistics Office of New Zealand are built on aggregates of actual money prices, or relatives made from such aggregates of actual prices, and therefore can readily be shifted to any desired base. The series here shown for Sweden and Australia are reproduced as published, the latter after being rounded off to three digits. It should be understood, also, that the validity of the comparisons here made is affected by the wide difference in the number of commodities included in the different series of index numbers.

¹ For a discussion of index numbers constructed according to this method, see Bulletin No. 181 of the Bureau of Labor Statistics, pp. 245-252.

WHOLESALE PRICES IN THE UNITED STATES AND CERTAIN FOREIGN COUNTRIES.

[Index numbers expressed as percentages of the index number for 1913. See text explanation.]

Year and month.	United States: Bureau of Labor Statistics; 328 commodities (variable).	Canada: Department of Labor; 272 commodities (variable).	United Kingdom: Board of Trade; 47 commodities.	France: Statistique Générale; 45 commodities.	Italy: Riccardo Bachi; 40 commodities.	Sweden: Svensk Handels-tidning; number of commodities not stated.	Australia: Bureau of Census and Statistics; 92 commodities.	New Zealand: Census and Statistics Office; 140 commodities.
1913.....	100	100	100	100	100	¹ 100	.....	100
1914.....	100	100	101	102	95	116	² 100	102
1915.....	101	110	124	140	133	145	141	121
1916.....	124	134	160	188	200	185	132	131
1917.....	176	174	209	262	306	244	146	148
1918.....	196	205	230	339	409	339	170	172
1919.....	212	216	254	356	366	331	.....	175
1914.								
January.....	100	101	.....	100	102	.....	.....	.....
April.....	98	101	.....	100	92	.....	.....	.....
July.....	100	99	.....	101	92	.....	.....	.....
October.....	99	102	.....	107	98	.....	.....	.....
1915.								
January.....	99	103	.....	124	105	.....	.....	.....
April.....	100	108	.....	135	121	.....	.....	.....
July.....	101	111	.....	142	130	.....	.....	.....
October.....	101	112	.....	158	148	.....	.....	.....
1916.								
January.....	110	127	.....	179	184	.....	.....	.....
April.....	117	132	.....	190	201	.....	.....	.....
July.....	119	132	.....	186	193	.....	.....	.....
October.....	134	138	.....	198	207	.....	133	.....
1917.								
January.....	151	154	.....	215	229	.....	133	.....
April.....	172	169	.....	248	265	.....	136	.....
July.....	186	179	.....	268	304	.....	148	.....
October.....	181	179	.....	294	350	.....	155	.....
1918.								
January.....	185	190	.....	313	363	.....	164	160
February.....	186	194	.....	319	380	.....	164	159
March.....	187	199	.....	327	394	.....	167	161
April.....	190	199	.....	333	401	.....	168	166
May.....	190	204	.....	335	409	.....	171	167
June.....	193	207	.....	329	415	.....	171	169
July.....	198	210	.....	337	429	.....	170	172
August.....	202	210	.....	350	432	.....	172	177
September.....	207	211	.....	355	433	.....	172	179
October.....	204	214	247	360	442	370	173	182
November.....	206	215	246	358	437	367	172	186
December.....	206	213	258	353	371	372	172	187
1919.								
January.....	203	211	248	348	325	369	171	180
February.....	197	206	249	340	321	358	167	176
March.....	201	205	254	337	325	354	168	170
April.....	203	206	252	332	332	339	171	168
May.....	207	210	236	325	338	330	172	167
June.....	207	210	238	330	358	324	173	168
July.....	218	217	242	349	362	320	176	170
August.....	226	222	257	347	369	321	182	174
September.....	220	223	264	360	372	319	185	178
October.....	223	221	274	382	390	307	200	179
November.....	230	227	289	405	439	308	199	181
December.....	238	238	297	423	457	317	197	183
1920.								
January.....	248	250	306	487	504	319	203	190
February.....	249	254	316	522	556	342	206	194
March.....	253	258	322	554	619	354	209	202
April.....	265	261	321	588	679	354	217	205
May.....	272	263	319	550	659	361	225	206
June.....	269	258	338	493	614	366	233	205
July.....	262	256	347	496	613	364	234	215
August.....	250	244	325	501	632	365	236	.....
September.....	242	241	.....	525	660	362	230	.....

¹ July, 1913-June, 1914.² July, 1914.

Summary of Important Facts Relating to Production and Prices of Commodities.

IN CONTINUATION of the policy announced in a previous issue of the MONTHLY LABOR REVIEW, there is presented herewith a brief statement of important facts concerning the production and prices of a few basic commodities. While the information here given is too limited in scope and the factors entering into the situation are too many and varied to permit of definite conclusions being formed, it is believed that the figures will be found of interest in connection with the recent price declines in these commodities.

Cotton.

ESTIMATES of the 1920 cotton crop, made by the Bureau of Crop Estimates of the United States Department of Agriculture on September 25, placed the production at 12,123,000 bales. This compares with 11,330,000 bales in 1919 and 12,424,000 bales as the average for the five years 1914 to 1918.

The total carry over of American grown cotton from the previous crop was 3,255,218 bales, exclusive of linters, on July 31, 1920, according to preliminary figures issued by the Bureau of the Census. Cotton ginned up to September 25 was 2,243,030 bales, compared with 1,835,214 bales in the corresponding period of last year and 3,770,611 bales in 1918. Reports of the Bureau of the Census also show that the number of bales, exclusive of linters, consumed by American mills from August 1 to September 30 amounted to 940,840 bales, against 988,388 bales for the corresponding period in 1919. The number of bales reported in manufacturing establishments on September 30 was 907,288 bales, against 1,067,970 bales for the same date last year, and in independent warehouses and at compresses 2,792,152 bales, against 2,502,307 bales last year. Active spindles were reported as 34,040,806, compared with 34,219,991 last year. Imports of cotton, principally from Egypt, for the eight months ending with August, 1920, are shown by reports of the Bureau of Foreign and Domestic Commerce to have been 259,472,297 pounds, compared with 80,205,843 pounds for the same period in 1919. Exports in this period were 1,982,687,809 pounds in 1920 and 2,137,768,967 pounds in 1919. Information contained in the Market Reporter, published weekly by the Bureau of Markets of the United States Department of Agriculture, places the exports during the period from August 1 to October 29 at 959,831 bales in 1920 and 1,061,340 bales in 1919. The world's visible supply of American cotton to October 29 is given at 3,519,062 bales in 1920, as compared with 3,496,831 bales in 1919.

The average price received by cotton growers on November 1, as reported by the Bureau of Crop Estimates, was 19.4 cents a pound, compared with 36.5 cents on November 1, 1919, and 18.5 cents in the five years from 1914 to 1918. The following statement comparing prices of raw and manufactured cotton has been reproduced from the Market Reporter for October 23, 1920.

PRICES OF RAW COTTON, YARNS, AND COTTON FABRICS.

	July 9, 1914.	Sept. 24, 1919.	Mar. 11, 1920.	Sept. 1, 1920.	Sept. 14, 1920.	Oct. 14, 1920.
Raw cotton, $\frac{1}{8}$ -inch staple...per pound..	¹ \$0.1331	² \$0.3161	² \$0.4037	² \$0.2933	² \$0.2930	² \$0.2126
Yarns:						
Southern single chain warps, 24s .....per pound..	.23-.235	.73-.72	1.00-1.05	.70	.62	.51-.52
Southern single skeins, 14s .....per pound..	.21	.56-.58	.76-.78	.60	.56	.44-.45
Fabrics:						
Drills, 37 inches wide....per yard..	.08	.22	.29	.20	.20	.155
Weighing 3 yards per pound .....per pound..	.24	.66	.87	.60	.60	.465
Brown sheeting:						
36 inches wide, 48 by 48...per yard ³ ..	.0725	.23	.28	.19	.20	.175
Weighing 3 yards per pound .....per pound..	.2175	.69	.84	.57	.60	.525

¹ Price at New Orleans, La.² Averages determined from the quotations of the 10 designated spot markets.³ 48 threads per inch of warp and filling, respectively.

Records of the Bureau of Labor Statistics show that the spot price of middling cotton at New Orleans, based on Tuesday's quotations in each week, averaged 20.88 cents a pound in October, 1920, compared with 35.38 cents in October of last year. At New York the averages were 22.61 cents and 35.46 cents, respectively. Twisted cotton yarns (20/2) in the Boston market averaged 43.52 cents a pound, net, in October, 1920, and 69 cents in October, 1919. Print cloth (27-inch, 64 by 60) in the same market was 8.20 cents a yard in October, 1920, compared with 11.81 cents in October of last year. Standard brown sheeting was 20.10 cents a yard in October, 1920, and 22.94 cents in the same month of last year. One brand of bleached muslin averaged 23.93 cents a yard in October of the present year, compared with 29.40 cents in October, 1919, while another brand was 34.30 cents in October, 1920, and 32.09 cents in October, 1919. A well-known brand of gingham was quoted at 18.53 cents in October, 1920, and at 22.50 cents in October, 1919. Practically all cotton manufactures have declined materially in price since the spring and summer of the present year.

Wool.

THE wool clip of 1920, exclusive of pulled wool, is estimated by the Department of Agriculture at 259,307,000 pounds, compared with 265,338,000 pounds in 1919. The average for the five years from 1914 to 1918 was estimated at 242,875,000 pounds.

Imports of raw wool of all kinds, as reported by the Bureau of Foreign and Domestic Commerce, totaled 213,531,918 pounds in the first eight months of 1920, compared with 294,606,633 pounds in the corresponding period of 1919. Exports in the period were 5,908,900 pounds in 1920 and only 706,455 pounds in 1919.

The consumption of wool in the United States during the first eight months of 1920 was estimated by the Bureau of Markets at 484,700,000 pounds, grease equivalent. This compares with an estimate of 427,200,000 pounds in the first eight months of last year, and 627,000,000 pounds in the whole year. During 1919 the decrease

in the consumption of medium and coarser wools and the marked increase in the consumption of finer wools were noticeable features. In the present year the tendency has been toward an increase in the consumption of the lower grades of wool, with a consequent lessening of the demand for the finer grades.

Wool growers of the United States received an average price of 27.5 cents per pound on Oct. 15, 1920, as against 50.6 cents on the same date last year, according to information published in the Monthly Crop Reporter. In 1914 the average for this date was 18 cents per pound. The average price received by producers on October 15 in the five years from 1914 to 1918 was 36.5 cents per pound.

Unwashed wool prices in the Boston market on October 1, 1920 and 1919, as shown by records of the Bureau of Labor Statistics, were as follows: Ohio fine clothing, 45 cents a pound in 1920 compared with 72 cents in 1919; fine delaine, 60 cents a pound in 1920 compared with 90 cents in 1919; half blood, 52 cents a pound in 1920 compared with 82 cents in 1919; and one-fourth and three-eighths grades, 40 cents a pound in 1920 compared with 68 cents in 1919.

Worsted yarns in the Philadelphia market were quoted at \$2.75 a pound for 2-40's, half blood, and \$3.25 a pound for 2-50's, fine domestic, on October 1 of the present year, compared with \$3.75 and \$4.30 a pound, respectively, on October 1 of last year. One line of broadcloth was priced at \$3.02 per yard, net, on October 1, 1920, compared with \$3.82 on the same date last year, while another line was offered at \$2.81 per yard on this date in the present year compared with \$3.04 last year. A line of worsted filled trousering was priced at \$2.20 per yard on October 1, 1920, compared with \$2.35 on the corresponding date in 1919. In other woollen manufactures for which prices were collected by the Bureau of Labor Statistics little change was reported for the two dates.

Hides and Leather.

IT IS shown in reports of the Bureau of Markets that the number of cattle hides in stock and in transit during the months of April, May, and June of the present year was considerably greater than in the corresponding period of 1919. On April 30, 1920, the number reported was 6,057,770, compared with 5,256,384 on the same date in 1919. On May 31 it was 5,830,341, compared with 4,551,004 in 1919, and on June 30, the latest date for which information is available, the number was 6,212,946, compared with 4,696,332 on June 30, 1919. Calf and kip skins also were more plentiful in 1920 than in 1919, while goat and kid skins were scarcer.

On June 30, 1920, there were in the hands of tanners 2,347,340 cattle hides and 2,585,525 calf and kip skins, compared with 2,530,140 cattle hides and 1,986,249 calf and kip skins on the same date in 1919. It is roughly estimated that from four to six months usually elapse from the time the raw materials arrive at the tannery until the shoes or other leather products are in the hands of the consumer. This estimate does not take into consideration the stocks of leather held by manufacturers or the stocks of leather goods held by merchants in anticipation of orders. Stocks of hides and skins held by packers,

dealers, and importers were somewhat larger in the first half of 1920 than in 1919.

Imports of cattle hides in the eight months ending with August, 1920, according to the Bureau of Foreign and Domestic Commerce, were 204,031,094 pounds, compared with 216,305,242 pounds in the first eight months of 1919. Calfskins imported in the period were 27,922,679 pounds in 1920 and 33,388,675 pounds in 1919, while the total for all hides and skins (except fur skins) was 402,772,854 pounds in 1920 and 414,744,120 pounds in 1919. Exports of domestic hides and skins, of which cattle hides formed the bulk, were 14,028,082 pounds in the first eight months of 1920, against 16,626,189 pounds in the same period a year earlier.

From data gathered by the Bureau of Labor Statistics it is found that the average price for October of packers' hides from heavy native steers in Chicago, based on quotations in each week, was 25.5 cents a pound in 1920 and 48.2 cents a pound in 1919. No. 1 country calfskins in Chicago averaged 18.4 cents per pound in October, 1920, compared with 77.6 cents in October of last year. Brazilian goat-skins at New York were \$1.23 per pound in October of the present year, compared with \$2.20 per pound in October of last year. In finished leather, No. 1 hemlock sole leather averaged 49 cents a pound in Boston in October, 1920, compared with 57 cents in October, 1919; chrome calf averaged 75 cents a square foot in October, 1920, compared with \$1.25 in October, 1919; glazed kid averaged 77.5 cents a square foot in October, 1920, compared with \$1.30 in October, 1919; and chrome tanned black side leather averaged 50 cents a square foot in October, 1920, compared with 85 cents in October, 1919.

Prices of men's and women's shoes in some instances show appreciable declines from the prices prevailing a year ago. One line of men's shoes was priced at \$6 in October, 1920, compared with \$7 last year. Another line was \$7 compared with \$8 in October of last year. A third line was offered at \$7.94, net, compared with \$9 in October of last year. Comparable decreases in the prices of women's shoes were reported to the bureau, while slight declines took place in children's shoes between these two dates.

Investigation of Cost of Living of Women Workers by Industrial Welfare Commission of Texas.

THE Industrial Welfare Commission of Texas recently completed a cost of living investigation in 40 cities of the State covering a period of eight months, during which time 2,028 women were personally interviewed and asked to fill in sworn questionnaires giving an estimate of their cost of living during the three months preceding the time of the investigation, their figures being based on actual expenditures and not on what they considered would be a fair amount to spend for living. The results of the survey have been forwarded to this bureau and are summarized in the following table, which shows the average cost of living in the four principal industries

in which the women questioned were employed, and also the average weekly wages of 13,311 employees as furnished by employers in 40 cities:

AVERAGE WEEKLY COST OF LIVING OF 2,028 WOMEN AND AVERAGE WEEKLY WAGES OF 13,311 WOMEN, IN 4 PRINCIPAL INDUSTRIES IN WHICH WOMEN ARE EMPLOYED IN TEXAS.

Industry.	Number of employees.	Cost of living per week.		Average wages per week.
		Total.	Average.	
Telephone.....	303	\$4,284.75	\$14.14	\$12.31
Mercantile.....	952	14,695.75	15.44	12.98
Laundry.....	375	5,166.75	13.78	9.39
Factory.....	398	5,831.50	14.65	11.52
Total.....	2,028	29,978.75	14.78	11.98

Retail Price Changes in Great Britain.

THE following table gives for Great Britain the increase over July, 1914, in the cost of food and general family expenditure for November of each year, 1914 to 1920, and for each month in 1920. The food items included in this report are: Ribs and thin flanks of beef, both British and chilled or frozen; legs and breast of mutton, British and chilled or frozen; bacon; fish; flour; bread; tea; sugar; milk; butter, fresh and salt; cheese; margarine; eggs; and potatoes.

The table gives percentage of increase and is not one of relative prices, as is the table given for the United States. When making comparisons this should be borne in mind, and to obtain the relative prices it is necessary to add 100 to the percentage as given, e. g., for January, 1920, the increase in cost of food is 136 per cent, the relative price being 236.

The figures represent two comparisons: First, the increase in prices, based on the same kinds and quantities as used in July, 1914; second, the increase, based on the change in the standard of living, resulting from a substitution of one kind of food for another to meet war-time conditions.

The table shows that retail prices of food were 191 per cent higher in November, 1920, than in July, 1914, and that the increased cost of all items in the family budget was 176 per cent.

PER CENT INCREASE IN COST OF FOOD AND ALL ITEMS IN FAMILY BUDGET IN GREAT BRITAIN, BASED ON JULY, 1914.

[Compiled from the British Labor Gazette.]

Year and month.	Food.		All items in family budget.	
	Retail prices (assuming same kinds and quantities).	Expenditures (allowing for estimated changes in consumption).	Cost (assuming same kinds and quantities).	Expenditure (allowing for estimated changes in consumption).
November—				
1914.....	13			
1915.....	41			
1916.....	¹ 78		² 55	
1917.....	106	³ 59	³ 85	
1918.....	133	⁴ 97	⁵ 120-125	⁴ 100
1919.....	131	⁴ 119	125	⁴ 115-120
1920.				
January.....	136	115	125	115
February.....	135	112	130	115
March.....	133	107	130	115
April.....	135	(⁶)	130-135	(⁶)
May.....	146	(⁶)	141	(⁶)
June.....	155	(⁶)	150	(⁶)
July.....	159	(⁶)	152	(⁶)
August.....	162	(⁶)	155	(⁶)
September.....	167	(⁶)	161	(⁶)
October.....	170	(⁶)	164	(⁶)
November.....	191	(⁶)	176	(⁶)

¹ Including tax on sugar and tea.² Not including taxes.³ Including taxes.⁴ Based on change in standard of food consumption adopted by the Ministry of Food.⁵ The increase, excluding additional taxation, is 7 per cent less.⁶ No longer calculable, mainly owing to decontrol.

Cost of Living in Argentina.

A RECENT monthly publication¹ of the Argentine Department of Labor contains interesting information concerning the cost of living in Argentina. It is stated that in general the prices of the articles of prime necessity have shown a rather marked increase in 1919 as compared with similar figures for the previous year. The 105 articles of general use for which the prices were followed month by month are grouped as follows: Food and drink; cleaning supplies; furniture and kitchen articles; and miscellaneous. Of the 59 articles in the first group, 22 decreased in price as compared with 1918, and most of the others increased, especially glazed rice, sugar, coffee, meat, dried prunes, fat, pepper, etc. A general increase was noted in the second group—cleaning supplies—common soap and scouring bricks showing the greatest increase. An average increase of 45 per cent was reported for the 32 articles in the third group—furniture and kitchen articles. About the same is true of the miscellaneous group, in which are included fuel oil, coal, matches, kerosene, candles, hemp sandals, etc. Here the increase was 43 per cent.

The average price for the year 1916, which was marked by scarcity and consequent high prices, was taken as the base for determining the average relative prices in 1917, 1918, and 1919. The following table will show the general upward trend of prices from 1916 to 1919:

¹ Cronica Mensual del Departamento Nacional del Trabajo, pp. 507, 508, 510, 511. Buenos Aires, Agosto de 1920.

INDEX NUMBERS FOR ARTICLES OF PRIME NECESSITY IN ARGENTINA, 1917, 1918, AND 1919, AS COMPARED WITH 1916.

[1916=100.]

Year.	Food and drink.	Cleaning supplies.	Furniture and kitchen articles.	Miscellaneous.
1916.....	100	100	100	100
1917.....	119	119	111	115
1918.....	143	133	130	159
1919.....	153	141	175	202

More detailed figures are given concerning the price of sugar during 1919 and 1920. The following table shows the actual and relative changes in the price of sugar at specified dates in 1920 as compared with the average for 1919:

ACTUAL AND RELATIVE PRICES OF SUGAR IN ARGENTINA AT SPECIFIED DATES IN 1920, AS COMPARED WITH 1919.

[1 peso at par=96.5 cents. Average for 1919=100.]

Period.	Loaf sugar (per kilo ¹).		Granulated sugar (per kilo ¹).		Lump sugar (per 10 kilos ¹).	
	Average price.	Index number.	Average price.	Index number.	Average price.	Index number.
Average for 1919.....	<i>Pesos.</i> 0.74	100	<i>Pesos.</i> 0.56	100	<i>Pesos.</i> 6.94	100
1920.						
Jan. 1 to 12.....	.58	78	.52	93		
Jan. 1 to Mar. 25.....					5.70	82
May 24 to June 27.....	.60	81				
June 5 to 22.....			.65	116		
May 24 to June 22.....					5.80	83
July 20 to 22.....	.88	119	.82	146		
July 19 to 25.....					10.00	144
July 30 to Aug. 10.....	1.05	142				
July 30 to Aug. 17.....			1.00	179		
July 26 to Aug. 10.....					11.50	166
Aug. 11.....	.76	103			7.60	110
Aug. 18.....			.76	135		

¹ 1 kilogram equals 2.2 pounds.

Another phase of the cost-of-living study was an investigation of 84 workmen's families in Buenos Aires for the purpose of ascertaining the extent of appeals for help and the estimate of average annual expenditures necessary to meet their daily needs, as well as to observe the conditions under which they were living. These 84 families consisted of 507 persons, including 347 children, or an average of 6 persons to a family.

Of the total number, 173 persons, old and young, or 34.1 per cent, were employed. It was noted that in the 38 cases in which the income exceeded the expenditures, 40 per cent of the members of the families were working; and in the 44 cases in which there was a deficit, only 27.2 per cent were employed. In the 2 cases in which income and expenses were equal 45.4 per cent were at work. The total annual income of these 84 families was 143,860 pesos (\$138,796, par), which would give a monthly income of 142.72 pesos (\$137.70, par) per family.

It is stated that the family expenditures were apportioned as follows:

	Per cent of total.
Food.....	59.6
Clothing.....	8.4
Rent.....	17.8
Fuel.....	4.1
Books and newspapers.....	.7
Labor organizations.....	.3
Amusements.....	.1
Wines and liquors.....	3.6
Tobacco.....	3.5
Miscellaneous.....	1.9

The fact that 80 of the 84 families occupy one-room dwellings shows the deplorable hygienic conditions under which they live. The following table shows the number of families, distributed by the number in each family, occupying one-room dwellings:

FAMILIES OCCUPYING ONE-ROOM DWELLINGS.

Occupants per dwelling.	Cases.	Total occupants.
3.....	13	39
4.....	10	40
5.....	15	75
6.....	11	66
7.....	9	63
8.....	13	104
9.....	4	36
10.....	2	20
11.....	1	11
12.....	2	24
	80	478

There were 13 cases in which the occupants of one room were a husband, wife, and one child, and 10 cases in which there were a husband, wife, and two children. On the other hand, there were two cases in which the parents and eight children lived in only one room and in another case the parents and nine children. In two instances the father, mother, and ten children occupied a single room.

It is stated that of these 80 one-room dwellings, only 19 have both door and window, 59 per cent being without ventilation of any kind.

Living Costs in Constantinople.¹

THAT the cost of living in Turkey is even yet over 15 times what it was before the war is shown by a table of comparative prices recently published by the Dette Publique Ottomane. The basis taken is the prices per month of articles of prime necessity for a person of ordinary means, using the prices for July, 1914, as a standard. The percentage increase for the month of July, 1920, as contrasted with July, 1914, amounts to 1,567 per cent for food alone, and 1,418

¹ Data forwarded to this Bureau by United States trade commissioner at Constantinople, under date of Sept. 25, 1920.

per cent for food and other necessities. The present scale of prices is higher than at any time since the armistice. The following table gives comparative figures for July, 1914, and July, 1920 (in Turkish piasters):

COST PER PERSON OF FOOD AND OTHER NECESSITIES IN CONSTANTINOPLE IN JULY, 1914, AND JULY, 1920, AND PER CENT OF INCREASE.

[1 plaster at par=4.4 cents.]

Article.	Monthly quantity necessary per person.	Price in July, 1914.		Price in July, 1920.		
		Per oke. ¹	Per necessary quantity.	Per oke. ¹	Per necessary quantity.	Per cent of increase over July, 1914.
FOOD.						
Bread.....	16 okes.....	<i>Piasters.</i> 1.875	<i>Piasters.</i> 30.00	<i>Piasters.</i> 20.25	<i>Piasters.</i> 324.00	980
Sugar.....	1 oke.....	3.00	3.00	85.00	85.00	2,733
Coffee.....	100 drams.....		3.00		27.50	813
Rice.....	2 okes.....	3.00	6.00	54.00	108.00	1,700
Macaroni and food pastes.....	do.....	3.00	6.00	54.00	108.00	1,700
Potatoes.....	6 okes.....	1.00	6.00	18.25	109.50	1,725
Beans, etc., chick peas.....	4 okes.....	4.00	16.00	30.00	120.00	650
Onions.....	2 okes.....	.50	1.00	10.00	20.00	1,900
Oil.....	$\frac{1}{2}$ oke.....	8.00	4.00	133.25	66.625	1,566
Salt.....	do.....	1.50	.75	10.00	5.00	567
Milk.....	8 okes.....	2.00	16.00	45.00	360.00	2,150
Cheese (kacher).....	1 oke.....	12.00	12.00	300.00	300.00	2,400
Mutton.....	4 okes.....	7.00	28.00	160.00	640.00	2,186
Butter.....	1 oke.....	10.00	10.00	150.00	150.00	1,400
Eggs.....	16.....	2.50	8.00	24.50	72.00	800
Total for food.....			149.75		2,495.625	1,567
OTHER NECESSITIES.						
Soap.....	160 drams.....		2.75		28.75	945
Petroleum for lighting.....	1 oke.....	1.50	1.50	27.00	27.00	1,700
Charcoal for cooking.....	10 okes.....	.50	5.00	8.00	80.00	1,500
Wood for heating.....	$\frac{1}{2}$ tcheki ³	445.00	11.25	445.00	111.25	889
Clothing.....			50.00		694.00	1,288
Shoes.....			15.00		134.00	793
Total, other necessities.....			85.50		1,075.00	1,157
Grand total.....			235.25		3,570.625	1,418

¹ 1 oke=2.83 pounds.

² Each.

³ 1 tcheki=250 kilos.

⁴ Per tcheki.

The above table deals only with the actual necessities of life, excluding all luxuries and even rents. In this connection it is interesting to note that the Dette Publique Ottomane estimates that house rents have increased 400 per cent and office rents 900 per cent for the six-year period. Reduced to its simplest terms this comparison means that before the war a single person could live on 235.25 piasters (\$10.35, par) a month while now 3,570.625 piasters (\$157.11) are required. These large increases affect both the natives and the foreign population. For instance, the American dollar, commanding the highest premium of any foreign currency, was quoted at \$0.93 late in July, 1920, as compared with the normal parity of \$4.40, thus giving it an increased purchasing power of somewhat less than 500 per cent, while at the same time the cost of food has increased over three times this amount.

WAGES AND HOURS OF LABOR.¹

New Wage Scale for Illinois Bituminous Coal Miners.²

THE award of the Bituminous Coal Commission³ not having proved satisfactory to all employees affected in the central competitive field, separate scales have been negotiated in the various States wherever such a plan could be mutually agreed upon. The following table gives the scale as determined upon by the United Mine Workers and the Illinois operators, the new rates being an increase over the award of the Bituminous Coal Commission. The original rates for day men and monthly men, with the increase as applied by the Coal Commission, and the additional increase of \$1.50 per day under the new agreement which became effective on August 16, 1920, based on an eight-hour day, are included in the table.

DAILY AND MONTHLY WAGE SCALE FOR UNITED MINE WORKERS IN ILLINOIS,
EFFECTIVE AUG. 16, 1920.

Daily rate.

Occupation.	Old rate.	Rate under award of Bituminous Coal Commission.	New rate of Aug. 16, 1920.
Mine examiners.....	\$5.54	\$6.54	\$8.04
Tracklayers.....	5.00	6.00	7.50
Tracklayers' helpers.....	4.75	5.75	7.25
Bottom cagers.....	5.00	6.00	7.50
Drivers.....	5.00	6.00	7.50
Trip riders and grippers.....	5.00	6.00	7.50
Water and machine haulers.....	5.00	6.00	7.50
Timbermen.....	5.00	6.00	7.50
Pipemen.....	4.91	5.91	7.41
Shotfirers.....	¹ 1.868	¹ 1.993	¹ 1.18
All other inside day labor.....	4.75	5.75	7.25
Firemen and stokers.....	4.75	5.75	7.25
Minimum outside wage.....	4.36	5.36	6.86
Sinkers.....	5.54	6.54	8.04
Shift leaders.....	5.93	6.93	8.43

Monthly rate.

Class A mines:			
First engineer.....	\$165.00	\$196.25	\$241.88
Second engineer.....	153.32	184.57	230.20
Third engineer.....	147.49	178.74	224.37
Class B mines:			
First engineer.....	159.15	190.40	236.03
Second and third engineers.....	147.49	178.74	224.37
Class C mines:			
First engineer.....	159.15	190.40	236.03
Second engineer.....	144.57	175.82	221.45
Class D mines:			
Employing one or two engineers, each engineer.....	141.65	172.90	218.53
Engineers employed in course of sinking.....	² 5.50	² 6.50	² 8.00

¹ Per hour.

² Per day.

In addition to the above it is stipulated that blacksmiths and motor-men shall receive an increase of \$1.50 a day and that all dead work performed by the miners and paid for by the day shall be paid at the increased rate of \$1.50 a day, or 18 $\frac{1}{4}$ cents an hour.

¹ For further wage data see the following articles in this issue of the REVIEW: The Wisconsin labor market, pp. 108 to 113; Employment and wages in Argentina, pp. 114 to 116; The telephone industry in New York State, pp. 117 to 122; Employment of women in industrial occupations in Oregon, pp. 122 to 125.

² Data taken from Illinois State Federation of Labor Weekly News Letter, Chicago, Oct. 16, 1920, p. 2.

³ See MONTHLY LABOR REVIEW for April, 1920, pp. 40-50.

Wages in Organized Occupations in Boston in 1914 and 1920.

THE Massachusetts Industrial Review, issue of July, 1920, contains a chapter showing changes in rates of wages and hours of labor in organized occupations in Boston on July 1, 1914 and 1920, from which the following table is taken:

AVERAGE RATES OF WAGES AND HOURS OF LABOR IN ORGANIZED OCCUPATIONS IN BOSTON IN 1914 AND 1920, BY OCCUPATION GROUPS.

Occupation group.	Num-ber of occu-pa-tions.	Rates of wages.						Hours of labor per week.	
		Per hour.			Per week.				
		1914	1920	Per cent of in-crease.	1914	1920	Per cent of in-crease.	1914	1920
Bookbinding.....	16	\$0.372	\$0.625	68.0	\$17.84	\$30.01	68.2	48	48
Bottlers and drivers.....	6	.319	.67	110.0	16.25	32.17	98.0	51	48
Brewery workmen.....	15	.372	.689	85.2	18.90	33.07	75.0	50.8	48
Building trades.....	23	.579	.984	69.9	25.54	42.40	66.0	44.1	43.1
Garment trades.....	6	.443	.939	112.0	22.17	41.30	86.3	50	44
Metals and machinery.....	11	.384	.846	120.3	20.27	40.32	98.9	52.8	47.6
Municipal employment.....	17	.393	.612	55.7	18.11	27.23	50.4	46.1	44.5
Printing and publishing.....	20	.493	.789	60.0	22.62	35.92	58.8	45.9	45.5
Stoneworking and quarrying.....	5	.559	1.00	78.9	24.59	44.00	78.9	44	44
Teaming.....	51	.262	.515	96.5	15.99	28.71	79.5	60.9	55.7
Woodworking and upholstering.....	16	.352	.632	79.5	16.88	27.96	65.6	48	44.3
Other trades and occupations.....	27	.361	.714	97.8	18.51	33.10	78.8	51.2	46.4
All occupations represented..	213	.374	.686	83.4	19.15	33.06	72.6	51.2	48.1

Trend Toward a Shorter Work Week in New York State Industries.

THE Bureau of Women in Industry of New York State reports, in the September issue of the bulletin issued by the industrial commission, that 25 of the largest department stores in New York City were closed all day on Saturdays during last July and August, and that almost that number closed for half the day. The employers testify that—

It actually pays in dollars and cents; for on Saturdays the number of sales decrease to a large extent as the New Yorker hurries out of town for his week-end in the country, while the overhead charges continue the same. Added to this is the increased efficiency of the sales people as the result of their two days' rest in the hot summer months.

In smaller communities more and more stores are closing a half day in the week, ordinarily Wednesday or Thursday afternoon, Saturday closing being impracticable because the people in those communities are accustomed to shop at that time.

"Saturday afternoon off" for factory workers in New York State was until recently confined to large manufacturing centers, reports the bureau, but the practice is now being adopted in various industries in an increasing number of communities.

In visiting factories employing less than 50 people in the Hudson River towns and on Long Island, during the summer of 1920, representatives from the Bureau of Women in Industry found, without exception, the factories closing down at 12 or 1 o'clock on Saturday.

The report states that four employers who were somewhat skeptical on the subject of Saturday closing called their employees together

and each agreed that if the weekly production could be reached by Friday night the factory would close all day Saturday. The result appears to have been entirely satisfactory for in each case the weekly production was reached by Friday night. In instances where production records were not kept, the report declares, the employers testified to the fact that they could not see that business had fallen off as the result of the shorter work week.

If the present tendency is at all indicative of the future, it will not be long until the weekly half holiday will be universally recognized in office, factory, and store.

Five-Day Week in a Clothing Factory.

NET results following a 3½-year experience with a 5-day week plan of operation in a clothing factory in the Middle West are set forth in an article in the August 15 issue of *Factory* (Chicago). The plan grew out of a desire on the part of the management to reduce the working week provided the weekly production could be maintained, and a test was made, after the employees had voted favorably on the proposition, to determine whether or not the output of a 5½-day week could be achieved in 5 days, for until they got the same output in less time the week would not be shortened. The result of the test was satisfactory and the work week was reduced to 5 days, the understanding being that if the output should drop off they would automatically revert to Saturday work. As, after experiment, it was found that most of the workers were reaching their quota by Friday night, the management again shortened the week; that is, shortened the 5 days an average of 20 minutes each, so that whereas the employees had been working an average of about 8½ hours a day they were put upon an 8½ hours' schedule. Wages, it is stated, have not been affected by the shortening of the week since piece-rate and bonus methods of payment are in force.

The article notes four definite results as following the adoption of the 5-day week:

(1) The saving of power. The same output is secured by operating the machines about 10 per cent less time. The greater efficiency has been obtained, not so much by running the machines faster or more of the time, which in many instances would scarcely have been possible, but by using them more of the time when they are running. Less time is wasted between operations, when the motors would be going anyway.

(2) Reduction in absenteeism. In 1916, the year before the new schedule was adopted, there was 2.5 per cent of absenteeism a day. In 1917, the first year of the new schedule, this figure dropped to 1.62 per cent—the lowest it had ever been except in the comparatively quiet year of 1915.

(3) New sources of labor. Many women find it possible to work five days who could not or would not work in a factory without two free days a week. * * * They are an entirely new labor supply.

(4) More balanced production. Perhaps the greatest advantage of the 5-day week is that it affords a better method of keeping production in weekly balance throughout the factories. In the old days, the operatives worked from the beginning of the week on the assumption that they would be at it five days and a half, and governed their output per hour and per day accordingly. It was hardly possible to get them to hasten their output early in the week, as an insurance against emergencies later on. * * * The 5-day week has * * * keyed the organization up to the five-day pace. Normally, they turn out their quotas in that time. But if there is a slow-down for any reason, so that the quotas of certain groups can not be reached in five days, they are pledged to come down Saturday mornings and finish them. Instead of level-

ing all groups down to those that are slowest, therefore, the slowest are now automatically leveled up to those which have been able to maintain a normal production.

The management has not tried to increase its quotas under the 5-day week plan, but the plan has enabled it in this way to maintain the quotas more regularly. For this reason, the 5-day week has actually meant an increase in production.

Wages and Working Conditions in the Philippine Islands.¹

LABOR in the Philippines is showing a marked trend toward industrial centers, especially toward Manila. It is reported that there are now 73 labor unions on the islands with an aggregate membership of 54,064. The average workday is nine hours and ordinarily overtime is paid when these hours are exceeded.

The printers' union is the best organized. The average weekly wage of workmen in the leading printing establishments was 12.33 pesos (\$6.17, par) in 1914 and at present it is 25 pesos (\$12.50, par). A highly skilled compositor who received 15 pesos (\$7.50, par) a week in 1914 now receives 32 pesos (\$16, par). Clerks who are trained printers who were on a salary of 80 to 90 pesos (\$40 to \$45, par) a month in 1914 are now getting 250 to 275 pesos (\$125 to \$137.50, par) a month.

The following table shows the "average" wages in pesos of laborers employed in factories and industrial establishments in the city of Manila in 1919:

"AVERAGE" DAILY AND MONTHLY WAGES IN VARIOUS INDUSTRIES IN THE CITY OF MANILA IN 1919.

[1 peso at par=50 cents.]

Industry.	Number of employees.	Daily wages in pesos.		Monthly wages in pesos.	
		Maximum.	Minimum.	Maximum.	Minimum.
Bakeries.....	41	2.50	1.20	37.00	19.00
Barber shops.....	343	2.00	1.50	86.00	45.00
Box factories.....	39	1.60	1.25	40.00	33.00
Candy factories.....	20	2.50	1.00	120.00	30.00
Caramell factories.....	22			a 54.00	a 30.00
Carpentry shops.....	50	3.00	2.25		
Carriage factories.....	35	3.50	1.70		
Chocolate factories.....	34	1.80	.80		
Cigar and cigarette factories.....	37			b 15.00	b 3.00
Furniture shops.....	16	2.30	1.60	53.00	37.00
Garages and stables.....	138	2.00	1.50	60.00	40.00
Hat factories.....	64	2.00	1.40	77.00	37.00
Iron shops.....	52	2.80	1.50	48.00	37.00
Laundry plants.....	190	1.60	1.00	35.00	25.00
Machinery and repair shops.....	17	4.50	1.50		
Oil factories.....	25	2.00	1.60	112.00	23.00
Plumbing shops.....	9	3.00	1.50	94.00	75.00
Printing, lithographing, and binding.....	69	4.00	2.00	76.00	36.00
Saddleries.....	15	2.00	1.20	30.00	24.00
Sawmills.....	41	3.25	1.30	55.00	24.00
Shoe factories.....	89	2.20	1.50	50.00	50.00
Silversmiths and watchmaking.....	169	2.50	1.50	59.00	41.00
Slipper factories.....	100			b 12.00	b 8.00
Soap factories.....	34			49.50	32.00
Tailor shops.....	372			a 15.00	a 7.00
Tin shops.....	48	2.20	1.50	48.00	38.00

a With subsistence.

b Weekly.

¹ Source: "Philippine labor faces a new day," by Walter Robb, in *The Trans-Pacific*, a magazine of international service, October, 1920, pp. 81-86, Tokyo, Japan, and New York, N. Y.

It is estimated that the daily budget of an unmarried skilled workman amounts to 1.543 pesos (\$0.77, par) and the daily expenses of a married skilled workman with three children amount to 3.075 pesos (\$1.54, par). By comparing this latter budget with the maximum daily wages in the above table it is quite obvious that the average Filipino workman's family can not indulge in wild extravagance.

Employers find themselves dealing with the unions more and more through the bureau of labor's mediation. The unions' methods are persuasive rather than violent or mandatory; their demands are found to be reasonable when given consideration. The law still fails to furnish adequate provision against accidents, for old-age pensions, and for workmen's compensation. While legislation along this line halts, however, companies are voluntarily assuming greater responsibility toward the welfare of their workmen than the law requires.

For the 1,205,739 agricultural workers the daily maximum wage for the year 1919-20 in the different provinces (Leyte, Mountain Province, and Rizal excepted) ranged from 0.50 to 2.50 pesos (\$0.25 to \$1.25, par) and the minimum wage from 0.20 to 1.15 pesos (\$0.10 to \$0.58, par).

Although the labor supply in the Philippines is inadequate for their own needs, there is considerable emigration to the Hawaiian Islands.

The Hawaiian Sugar Planters' Association maintains an effective labor-recruiting service in the Philippines. More than 3,800 emigrants went to Hawaii in 1919 and only 948 returned. This movement has been in progress for years. Attempts have been made to prohibit it by legislation. An emigration fee system has been placed in operation, which is in effect a tax; but the obstacles are overcome simply because the workmen are willing to go to Hawaii for the higher wages offered. The obvious remedy is for local planters to establish higher wage scales and better living conditions on their own plantations.

The president of the Philippine Federation of Labor is planning to call a panoriental labor convention next year in Manila, at which time he proposes to bring before the delegates his project for a universal minimum wage scale and a working day of either eight or nine hours.

Wage Advance for British Pottery Workers.

A NEW scale of wages in the British pottery industry, effective March 25, 1920, was noted in detail in the August issue of the MONTHLY LABOR REVIEW (pp. 86-88). That scale represented an increase of 100 per cent over the prewar pay. Subsequently the pottery workers made demands for further advances in wages equal to another 21½ per cent above prewar standards, and threatened to strike on October 1 if an adjustment was not made. The national council of the pottery industry considered the matter fully at a meeting on September 25, and finally determined to make a recommendation to the employees on the following basis:

The present rate of wages and bonus (which stands at 50 per cent above prewar level, incorporated as wages, plus 33½ per cent as bonus) to be raised to 66⅔ incorporated, plus 25 per cent bonus;

Settlement of departmental notices to be expedited;

The increase to become payable on October 1, or whatever be the pay day next week.

These terms mean, according to a report of the Staffordshire (England) Sentinel for September 25, 1920—

(1) That, so far as the "general advance" is concerned, an operative's earnings will be 108½ per cent above prewar level, compared with 100 per cent at present and 121½ per cent demanded.

(2) That a greater percentage of the increased earnings is incorporated in wages—66½ compared with 50.

(3) That there is to be no retrospective pay, the new rates coming into force as from Thursday of this week, and becoming payable next week.

(4) That £1 (\$4.87, par) in prewar earnings is converted into £2 1s. 8d. (\$10.14, par) compared with £2 (\$9.73, par) at present and £2 4s. 2d. (\$10.75, par) demanded.

The operatives decided to accept the recommendation which was later submitted to the British Pottery Manufacturers' Federation and approved by it. The pottery workers are accordingly operating under the new scale.

Rates of Wages in Certain Occupations in New Zealand in September, 1920.

THE United States consul at Auckland, New Zealand, has transmitted through the Department of State the following data as to wages paid and prevailing hours of labor in certain occupations in the Dominion in September, 1920:

RATES OF WAGES PAID IN CERTAIN OCCUPATIONS, AND PREVAILING HOURS OF LABOR, IN NEW ZEALAND IN SEPTEMBER, 1920.

[£1 at par=\$4.8665; 1s. at par=24.3 cents; 1d. at par=2.03 cents.]

Occupation.	Weekly wage.	Over-time.	Hours per week.
	£ s. d.		
Bakers, foremen.....	4 19 0	(1)	2 10
Bakers, ordinary.....	3 4 9 0	(1)	2 10
Waterside workers:			
Foremen.....	5 15 0	(1)	44
Timekeepers.....	4 5 6	(1)	44
Butchers.....	3 4 5 0	1½	44
Plumbers and gas fitters.....	6 2 3		44
Tinsmiths.....	7 2 0	8 1½	44
Timber workers, machine men.....	2 17 2	(2)	47
Common labor for municipalities.....	7 1 7	8 1½	47

¹ Given as 3s. 4½d. to 4s. 6d. per hour, but not stated whether applicable to foremen or to ordinary bakers.

² Per day.

³ Plus a bonus of 6s. per week.

⁴ Given as 3s. 6d. per hour, but not stated whether applicable to foremen or to timekeepers.

⁵ Minimum; wages range up to £4 15s.

⁶ Per hour. A bonus of 1½d. per hour is also paid. Man in charge of gang gets 1s. extra per day. Employer must pay expenses in going to and from jobs as well as time taken from headquarters. Double time paid for work on holidays.

⁷ Per hour.

⁸ For first 3 hours overtime; thereafter double time.

⁹ Double time for Sundays, Christmas Day, and Good Friday.

Rates of Wages in Trinidad in 1919.

THE American consul at Trinidad, British West Indies, under date of September 30, 1920, reports the following average rates of wages in the island:

AVERAGE DAILY RATES OF WAGES IN TRINIDAD IN 1919.

Occupation.	Daily rates of wages.	Occupation.	Daily rates of wages.
Laborers.....	\$0.40- \$0.60	Motor-car drivers.....	¹ \$144.00-\$360.00
Drivers.....	.60- .80	Carpenters.....	.72- 1.44
Stockkeepers.....	.40- .60	Masons.....	.72- 1.44
Butlers, male.....	¹ 96.00- 192.00	Tailors.....	² 7.20-
Butlers, female.....	¹ 60.00- 96.00	Porters.....	.60- 1.00
Nurses.....	¹ 72.00- 96.00	Foremen, artisans.....	1.20- 2.00
Cooks, female.....	¹ 72.00- 192.00	Estate mechanics.....	.96- 1.44
Grooms.....	¹ 120.00- 168.00		

¹ Per year.² For each suit.

It is added that the rate of wages tends gradually to rise and in all industries there appears a scarcity of good labor.

Movement for a 44-Hour Week in New South Wales.

THE movement for a 44-hour week seems to be gaining some headway in New South Wales, Australia, according to a report from the American consul at Sydney under date of September 3, 1920. It appears that about 41,000 trade-unionists are enrolled in the movement, divided as follows: Building trades, 8,000; shearers, etc., 15,000; iron trades, 10,000; Broken Hill miners, 8,000. "Stop work" meetings were announced for September 4 by the iron trades and the Amalgamated Society of Engineers, while other organizations, notably an engineering society, a molders' federation, and the electrical trades and the blacksmiths' and plumbers' unions, have stated that they will not hold such meetings.

Although unanimous for the 44-hour week, various unions are not in accord on the question of working hours or the best course to pursue to secure the shorter week.

Wages of Women in the Candy Industry in Verviers, Belgium.

A SUMMARY of a report on wages and cost of living of women in the candy industry at Verviers, Province de Liège, Belgium, dated July 3, 1920, recently reached this bureau through the International Congress of Working Women (New York City). It shows that in a chocolate factory at that place the following wage scales were in force in March, 1919, and in March, 1920, the basis of payment being the nature of the work and the age of the workers, with no account being taken of experience.

WAGES OF CANDY WORKERS IN VERVIERS, BELGIUM, IN MARCH, 1919, AND 1920,
BY OCCUPATION AND AGE OF WORKERS.

[1 franc at par=19.3 cents.]

Occupation and age.	March, 1919.		March, 1920.	
	Hourly wage.	Bonus.	Hourly wage.	Bonus.
Packers:	<i>Francs</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
21 years.....	0.70	0.30	1.00	0.15
0 years.....			.90	.15
9 years.....	.35	.15	.80	.15
16 years.....	.25	.15		
14 years.....	.20	.15		
Half packers:				
18 years.....			.70	.10
17 years.....			.60	.10
Apprentices:				
16 years.....			.50	.10
15 years.....			.40	.10
14 years.....			.30	.10

The report states that women employed in taking chocolate out of the mold are paid 0.30 franc (5.8 cents, par) more per hour than the wages which they would receive as packers. Prior to the war the hours of labor were 57 a week and the wage was 2.25 francs (43.4 cents, par) a day for first-class workers.

At the time of the survey the hours were 49½ a week, or 9 hours a day, with 1½ hours for lunch. The week ends at Saturday noon, although employees in the shipping departments may work until 4 o'clock with 25 per cent increase in pay for the first two hours and 50 per cent increase for the following hours of overtime. The industry being seasonal, only 36 hours are worked each week during the slack period, which extends over three to four months. Instead of reducing the number of workers the work on hand is divided among them so that all work the same number of hours. The wages remain the same, since all work is paid for by the hour. Payment by the piece is not allowed in Verviers, as the union regulations do not permit it. All workers are members of trade-unions.

The report states that the number of bars of chocolate which a woman can wrap during a 9-hour day varies from 700 to 1,000, according to her skill. A survey recently made in a certain factory disclosed the fact that not one of four women packers could average over 900 bars a day working 9 hours, which gives a total of 19,800 bars for the four women during the week of 49½ hours, or 5½ days.

The cost of living is about four times as much as just before the war, declares the report, potatoes advancing from 0.15 franc (2.9 cents, par) per kilo to 0.55 franc (10.6 cents, par), butter from 1.25 francs (24.1 cents, par) per pound to 7 francs (\$1.35, par), and milk from 0.20 franc (3.9 cents, par) per quart to 0.90 franc (17.4 cents, par). The advance in cost of lodgings has been 30 to 40 per cent. A dress which before the war cost 80 francs (\$15.44, par) now costs 250 francs (\$48.25, par).

Wages in Denmark in 1914, 1919, and 1920.

THE following tables exhibit, respectively, average hourly wages paid to certain groups of workers in Denmark in 1914, the first quarter of 1919, and the first quarter of 1920, and in certain occupations in 1914 and in the first quarter of 1920. The second table presents the data separately for the city of Copenhagen and for the Provinces. In explanation, the United States minister at Copenhagen, who forwarded the information under date of September 21, 1920, through the Department of State, suggests that in grouping the trades the industry and trade to which the employees belong have been taken as a basis and within this group a division has been made according to the workers' trade or skill as well as between male and female workers, and that the average amounts per hour are then calculated on the total paid within the period divided into the number of hours in which the work was performed, irrespective of whether or not the workers were employed by the hour or on piecework. It is further explained that in comparing the figures for the different periods account should be taken of some fluctuation in the number of workers and trades represented, but it is believed that the consequent discrepancies in the average total is of no great importance since in each case the totals are based on a large number of workmen representing many different trades. The table showing average hourly wages in 1914, the first quarter of 1919, and the first quarter of 1920 is as follows:

AVERAGE HOURLY WAGES OF SKILLED AND UNSKILLED MALE WORKERS, AND OF WOMEN WORKERS IN DENMARK IN SPECIFIED PERIODS.

[1 öre at par=0.268 cent.]

Locality, and kind of worker.	Number of workers Mar. 31, 1920.	Average hourly wages.		
		1914.	First quarter, 1919.	First quarter 1920.
<i>Copenhagen.</i>		<i>Öre.</i>	<i>Öre.</i>	<i>Öre.</i>
Skilled workers, male.....	25,929	67.1	142	236
Unskilled workers, male.....	16,095	47.5	118	190
Total and average, males.....	42,024	61.0	133	218
Women workers.....	13,376	32.3	66	114
Total and average, all workers.....	55,400	54.4	119	193
<i>Provinces.</i>				
Skilled workers, male.....	23,818	54.8	117	191
Unskilled workers, male.....	21,223	43.8	99	158
Total and average, male.....	45,041	48.2	108	175
Women workers.....	6,839	25.7	53	104
Total and average, all workers.....	51,880	44.9	104	166
<i>Whole country.</i>				
Skilled workers, male.....	49,747	61.3	131	214
Unskilled workers, male.....	37,318	45.5	108	171
Total and average, males.....	87,065	55.0	121	196
Women workers.....	20,215	29.6	62	111
Total and average, all workers.....	107,280	50.2	112	180

The average wages per hour within each trade or group are shown in the following table. In comparing the wages in 1920 with those of 1914 allowance should be made for the constant depreciation of the value of the krone and the shortening of the working hours, which are now generally eight a day.

AVERAGE WAGES IN VARIOUS OCCUPATIONS IN DENMARK IN 1914 AND IN THE FIRST QUARTER OF 1920.

[1 öre at par=0.268 cent.]

Occupation.	Copenhagen.			Provinces.		
	Number of work-ers, Mar. 31, 1920.	Average hourly wages.		Number of work-ers, Mar. 31, 1920.	Average hourly wages.	
		1914	First quar-ter, 1920.		1914	First quar-ter, 1920.
<i>Food.</i>						
Bakers.....	1,029	Öre. 59.3	Öre. 192.2	653	Öre. 41.2	Öre. 168.2
Millers.....	105	49.0	199.2	139	40.8	161.4
Chocolate factories, skilled workers.....	43	65.4	209.4	20	.....	175.0
Chocolate factories, unskilled workers.....	95	43.7	167.8	25	.....	152.3
Chocolate factories, women.....	546	28.0	106.2	113	.....	84.8
Cannery works, women.....	31	41.5	160.2	8	.....	142.8
Cannery works, men.....	124	24.0	95.6	21	.....	80.8
Margarine factories, males.....	25	47.5	145.8	424	42.4	144.8
Margarine factories, females.....	2	.....	104.2	197	26.0	90.7
Slaughterhouses, males.....	216	48.5	166.2	348	.....	151.1
Slaughterhouses, females.....	18	29.7	97.8	28	.....	88.4
Alcohol factories, males.....	78	47.1	160.7	322	38.0	151.9
Alcohol factories, females.....	42	34.5	130.5	7	24.0	130.5
Sugar factories, males.....	478	58.3	182.8	853	42.5	147.6
Sugar factories, females.....	160	34.4	103.4	52	24.0	80.9
Various trades, males.....	73	.....	175.5	197	36.0	143.5
Various trades, females.....	197	.....	99.1	133	.....	97.0
<i>Tobacco.</i>						
Cigar factories, skilled.....	993	57.7	184.8	1,036	52.1	178.9
Cigar factories, unskilled.....	94	45.0	155.1	211	41.5	151.3
Cigar factories, females.....	2,663	36.0	121.8	1,860	27.0	105.0
<i>Textiles.</i>						
Textile workers, males.....	500	42.5	158.8	2,024	39.8	157.6
Textile workers, females.....	1,421	30.7	123.3	2,379	26.0	116.0
Ropemakers, skilled.....	23	47.0	155.4	64	42.2	154.0
Ropemakers, unskilled.....	30	42.5	150.6	31	37.1	136.5
Ropemakers, females.....	121	24.5	91.9	37	21.9	84.2
Trimming makers, skilled.....	22	.....	176.7	.....	.....	.....
Trimming makers, females.....	22	.....	90.1	.....	.....	.....
Sailmakers.....	16	.....	230.7	32	.....	182.2
<i>Clothing.</i>						
Tailors.....	342	58.0	198.2	67	44.5	176.6
Seamstresses.....	982	34.2	100.7	228	22.0	98.4
Hatters.....	58	77.5	231.5	6	.....	187.6
Hatters, females.....	253	44.0	135.3	22	.....	108.1
Skinners.....	40	.....	201.2	.....	.....	.....
Shoemakers.....	58	.....	185.1	16	43.0	127.3
Shoe factories, males.....	1,272	56.5	224.5	94	.....	170.4
Shoe factories, females.....	1,041	32.7	130.6	41	.....	97.3
<i>Leather.</i>						
Tanners.....	134	.....	250.4	108	.....	219.0
Tannery workers, males.....	208	.....	205.4	322	.....	186.1
Tannery workers, females.....	61	.....	146.5	28	.....	113.2
<i>Building.</i>						
Tinkers.....	179	66.0	228.7	181	49.0	174.5
Building joiners.....	903	75.4	262.2	1,768	51.2	182.9
Glaziers.....	55	54.0	197.2	51	42.9	152.5
Painters.....	1,153	72.0	225.8	536	51.5	167.7

AVERAGE WAGES IN VARIOUS OCCUPATIONS IN DENMARK IN 1914 AND IN THE FIRST QUARTER OF 1920—Continued.

[1 öre at par=0.268 cent.]

Occupation.	Copenhagen.			Provinces.		
	Number of work- ers, Mar. 31, 1920.	Average hourly wages.		Number of work- ers, Mar. 31, 1920.	Average hourly wages.	
		1914	First quarter, 1920.		1914	First quarter, 1920.
<i>Building—Concluded.</i>						
Masons, skilled.....	1,501	Öre. 86.0	Öre. 338.3	2,488	Öre. 57.5	Öre. 188.9
Masons, unskilled.....	1,218	61.5	265.9	2,091	45.5	161.6
Mill builders.....	14	.....	282.7	7	.....	167.6
Stucco workers.....	73	76.1	238.2	5	60.0	186.4
Carpenters, skilled.....	1,045	83.6	335.7	1,815	52.1	185.4
Carpenters, unskilled.....	50	48.5	213.7	72	43.8	146.9
Linoleum workers.....	57	.....	192.4	.....	.....	.....
Various workers.....	61	57.4	202.5	60	38.0	154.6
Terrazzo workers.....	31	63.5	215.8	10	.....	158.0
Isolation workers.....	70	82.5	245.5	3	.....	232.7
<i>Wood and furniture.</i>						
Coopers.....	133	59.2	217.6	197	56.0	194.1
Brush makers.....	87	.....	197.3	87	48.0	170.1
Carvers.....	39	64.5	220.1	54	59.4	216.0
Turners.....	34	54.0	205.1	101	50.5	185.8
Gilders.....	25	.....	215.8	39	.....	185.5
Coach builders.....	50	61.4	202.1	6	.....	193.2
Basket makers.....	53	.....	187.6	15	.....	199.7
Joiners.....	402	60.1	205.2	1,165	47.9	165.9
Various workers.....	448	40.8	165.4	550	37.9	138.7
Workers in piano factory.....	279	74.0	231.1	52	57.0	228.2
Whip workers.....	.....	.....	.....	62	.....	170.4
Harness makers and paper hangers.....	381	58.0	217.1	92	46.1	173.1
Cabinetmakers.....	869	60.2	213.3	160	50.8	188.1
Wood industry, females.....	143	.....	102.9	93	34.6	103.9
<i>Stone, glass, and ceramic.</i>						
Laborers and concrete workers.....	1,728	60.7	238.3	1,650	42.7	171.4
Other workers.....	214	61.4	265.2	468	47.3	160.4
Pavers.....	51	113.7	312.5	26	50.0	158.3
Stonecutters, skilled.....	141	69.9	244.6	165	60.0	197.7
Stonecutters, unskilled.....	83	48.0	183.3	110	.....	148.8
Gravel factories.....	.....	.....	.....	156	45.0	164.3
Brickyards.....	.....	.....	.....	217	41.5	163.7
Concrete factories.....	.....	.....	.....	665	46.0	154.3
Ceramic industry, skilled.....	212	87.2	197.9	20	.....	166.0
Ceramic industry, unskilled.....	349	61.4	168.8	84	43.7	135.8
Ceramic industry, females.....	1,099	53.3	122.9	7	.....	85.0
Glass cutters.....	30	.....	199.5	7	.....	177.8
<i>Metal.</i>						
Tinsmiths.....	233	67.3	233.4	100	54.3	193.6
Chasers.....	115	.....	233.8	9	.....	215.1
Electricians.....	724	66.3	216.5	821	61.1	202.6
Molders.....	422	60.3	256.1	764	64.6	222.7
Goldworkers.....	96	.....	224.9	13	.....	170.6
Braziers.....	203	56.8	226.7	74	54.6	196.4
Coppersmiths.....	67	72.3	255.7	57	56.5	208.3
Painters.....	58	89.8	203.5	160	65.1	185.4
Metal filers.....	162	54.9	244.5	60	.....	182.9
Metal pressers.....	91	60.5	252.7	4	58.3	232.0
Ship carpenters.....	248	78.2	277.7	484	57.2	211.0
Blacksmiths and machinists.....	7,146	61.7	230.8	6,347	55.0	199.9
Silversmiths.....	218	.....	252.7	114	.....	192.5
Woodworkers.....	648	70.7	227.4	956	53.7	189.4
Various skilled workers.....	193	55.8	228.5	79	.....	193.2
Laborers.....	4,894	48.5	183.5	5,520	45.6	160.3
Females.....	1,964	30.6	106.0	532	26.8	90.5

AVERAGE WAGES IN VARIOUS OCCUPATIONS IN DENMARK IN 1914 AND IN THE FIRST QUARTER OF 1920—Concluded.

[1 öre at par=0.208 cent.]

Occupation.	Copenhagen.			Provinces.		
	Number of work- ers, Mar. 31, 1920.	Average hourly wages.		Number of work- ers, Mar. 31, 1920.	Average hourly wages.	
		1914	First quar- ter, 1920.		1914	First quar- ter, 1920.
<i>Chemical.</i>						
Dyers.....	20	Öre.	Öre.	13	Öre.	Öre.
Oil mills.....	562	43.4	169.7	690	46.2	159.9
Sulphuric acid factories.....	118	50.0	161.5	520	46.2	160.5
Match factories, males.....	105	46.5	186.8			163.0
Match factories, females.....	180	28.5	174.8			
Miscellaneous, males.....	481	46.6	101.8	356		159.8
Miscellaneous, females.....	695	27.8	167.4	308		84.5
<i>Graphic industry.</i>						
Paper mills.....	161	43.8	152.6	906	36.0	145.4
Typographers.....	1,728	78.0	223.3	1,065	61.1	210.2
Lithographers.....	173	68.0	230.7	106	60.7	194.8
Chemigraphers.....	89	76.1	197.2			
Printers, unskilled.....	155	57.1	165.7	45	45.8	172.1
Printers, females.....	436	35.2	104.9	102	23.1	104.0
Lithographic workers, males.....	56	41.5	172.1	25	37.0	139.8
Lithographic workers, females.....	77	31.8	105.2	49	26.3	84.9
Bookbinders, skilled.....	343	50.5	226.8	104	43.7	165.1
Bookbinders, females.....	503	26.9	117.3	54	20.0	93.3
Paper-ware industries, males.....	28		174.6	8		135.4
Paper-ware industries, females.....	155		100.7	72		91.9
<i>Various occupations.</i>						
Expressmen.....	887	45.0	163.0	1,093	41.1	146.0
Foremen.....	474	87.4	134.2	498		97.1
Firemen.....	242	28.8	87.0	503	25.7	81.0
Chauffeurs.....	212		84.5	86		73.5
Teamsters.....	1,999	28.5	80.8	679	25.6	72.6

It is stated that since the first quarter wages have experienced a considerable rise, the general agreement reached between the chief organizations of employers and workers in April last adding an increase of 8 per cent to all wages, and the regulations consequent upon the publication of the price level figures in August raising all wages by 13 öre (3.5 cents par) per hour. Thus, to get at the present wages an increase approximating 14 per cent should be added to any of the figures for the first quarter of 1920, quoted in the above table.

New Wage Agreement Affecting German Transport Workers.¹

AN AGREEMENT drawn up by the German Transport Workers' Unions and the Central Association of Ship Owners, effective October 1, 1920, provides monthly wage rates as follows:

WAGE SCALE FOR GERMAN TRANSPORT WORKERS, EFFECTIVE OCT. 1, 1920.

[1 mark at par=23.8 cents.]

Occupation.	Monthly wage.
	Marks.
Boatswains on a long voyage.....	800
Boatswains on voyages to North Sea or Baltic.....	780
Able-bodied seamen on long voyages.....	735
Able-bodied seamen on voyages to North Sea or Baltic.....	720
Ordinary seamen.....	400
"Young seamen".....	350
Ship boys.....	250
Assistant machinists on long voyages.....	800
Assistant machinists on voyages to North Sea or Baltic.....	780
Cooks.....	775 to 825
Waiters and messmen.....	685 to 735

Wages in Barcelona, Spain.

THE American consul general at Barcelona, Spain, under date of August 20, sent to the Department of State a communication which was forwarded to this bureau, giving the following data as to wages received by skilled labor in Barcelona. The consul in this connection states that at the present time laborers, operators, and skilled mechanics work eight hours a day and six days a week, in accordance with the Spanish law which became effective early in 1919. Two hours are allowed for lunch.

AVERAGE WEEKLY WAGES OF SKILLED LABOR IN BARCELONA, SPAIN, IN AUGUST, 1920.

[1 peseta at par=19.3 cents.]

Occupation.	Average weekly wage.	Occupation.	Average weekly wage.
	Pesetas.		Pesetas.
Molders.....	66	Carpenters.....	70
Painters.....	42	Clerks.....	60
Pipe fitters.....	54	Crane operators.....	71
Planers.....	72	Press drill operators.....	60
Rivet heaters.....	48	Electricians.....	48
Riveters.....	60	Assemblers.....	74
Screw machine operators.....	66	Gear cutters.....	85
Shaper hands.....	64	Grinders and polishers.....	55
Toolmakers.....	68	Inspectors.....	108
Bench hands.....	78	Porters and cleaners.....	37
Welders.....	48	Watchmen.....	90
Blacksmith.....	45	Keyseaters.....	65
Boiler makers.....	55	Lathe hands.....	65
Drill hands.....	60	Rivet finishers.....	65

The pay of mechanics in the southern cities of Spain, the consul adds, is from 10 per cent to 35 per cent under the rates paid in the northern Provinces. Generally speaking, overtime is opposed by the trade-unions in Spain.

¹ Data supplied by American Commission at Berlin, under date of Oct. 14, 1920, transmitted to this Bureau by the Department of State.

VOCATIONAL EDUCATION.

Industrial Rehabilitation of Disabled Women.¹

AS THE administrative agency of the new industrial rehabilitation act,² approved June 2, 1920, the Federal Board for Vocational Education recognizes the right of disabled women to "the benefits of this law and believes it to be the duty of the States to provide equally for women as for men the vocational education intended by the act."

It is conservatively estimated that there are 12,000,000 women wage-earners in the United States. Statistics for 12 large cities show that "there are more working girls between the ages of 14 and 16 in the continuation schools than there are girls in the high schools." According to a report (1919-20) made by a special agent of the Federal Board for Vocational Education, the increase, since 1916, of women workers in the four industries given below has been:

	Per cent.
Iron and steel	40
Automobile.....	300
Instrument making.....	200
Woodworking.....	100

It has been the experience of industry that the number of women at work has not diminished since the war to the extent expected. There is, therefore, the probability that the industrial rehabilitation of women will become increasingly important.

Although the recent statistical records of several of the State industrial accidents boards and commissions would seem to indicate that the number of accidents to women in industry is small, it must be remembered that industrial accident reports are incomplete and also that women have not been included to any great extent under workmen's compensation legislation. Until recently approximately one-third of the women workers were in domestic service and one-fourth in agricultural pursuits. The State workmen's compensation laws do not cover domestic service, and except in New Jersey and Hawaii, agricultural employments are also excluded from such laws.

Another factor recognized by those who study the question as responsible for the comparatively small number of accidents involving women workers is their natural caution, together with the installation in many plants of safety devices for their protection. So great has been the reduction in the number of accidents in some plants since the employment of women, and the consequent reduction of cost, that women have been retained as employees in preference to men. This happened, according to the company's employment manager, in the General Electric Co., of Philadelphia. It was found that the number of accidents during the time women were employed on the great cranes in the plant was so materially reduced that the company refused to dismiss the women for men after the war. Another city reported the elevator service much improved, as to safety, during the time girl operators were used.

¹ Source: The Vocational Summary, October, 1920, p. 86. Federal Board for Vocational Education, Washington, D. C.

² See MONTHLY LABOR REVIEW for Apr., 1920, pp. 202-206, and June, 1920, pp. 186, 187.

All disabled women, however, are included in the industrial rehabilitation act whether they come from the ranks of the 12,000,000 women gainfully employed or from the ranks of the 25,000,000 women over 10 years of age who are not wage earners but are occupied in their own homes, the disabled women who have not been gainfully employed being eligible for vocational rehabilitation in order that they may be fitted to earn a living.

It is thought that possibly reticence may deter some women from availing themselves of the benefits of the act, and it is suggested that in order to carry out effectually the purposes of this legislation such agencies as the Red Cross, women's clubs, women's unions and trade-union auxiliaries, church societies, and women's business leagues be called upon to cooperate in publicity plans and in establishing a proper public attitude toward the work.

The appointment of a woman as supervisor of the rehabilitation of women in each State should be encouraged. It is generally admitted that the success of this work of industrial rehabilitation depends upon the degree of personal effort expended, and the individual consideration given each case; and women possess special qualifications to meet these requirements.

A Company Institute of Technology.

AN INSTITUTE of technology has just been established by a large motor company in the Middle West, to provide promising young men with higher training in engineering. Courses will be given in mechanical, chemical, and electrical engineering, each course occupying four years, half of which time is to be spent in the shops and the other half in class, lecture room, and laboratories, alternating every two weeks. Whether they are engaged in class or shop work, the freshmen¹ are to receive approximately \$20 a week. The work in all the courses will be the same the first year. After the first year the student will specialize with the advice of the officers.

For laboratory work the students will have available to them the vast scientific equipment of the company at its various plants—a railroad, a mine, a lumber camp, and various subsidiary operations.

It is felt that the——company's tremendous facilities for research work and education should, for the benefit of the country at large, be used not only for commercial supremacy and profit, but for the general elevation and equipment of young American manhood.

Commercial standards as to methods and cost of manufacture, shop organization, accuracy, production, and time will be emphasized. The company takes the position that—

Mere "inspection trips" can not possibly be a substitute for this actual participation in production. "School workshops" have decided disadvantages. Real workshops on a production basis call for little readjustment when the training period is finished.

A certificate of graduation from a preparatory school is not a guarantee of acceptance by the institute. "Conditional admission will be entirely at the discretion of the officers." To be eligible for entering a course a candidate must be at least 18 years of age, and a personal interview is necessary before he is considered for admission.

¹ At this time announcement is made only in regard to freshmen.

A physical examination by a physician of the company is also required.

With reference to students who have already attended a college or university it is stated that no advance standing will be granted during 1920-21 but that announcement concerning such cases will be made at a later date.

In order to be graduated a student must have earned during the four years of his course 384 hours of credit—192 hours of academic and 192 hours shop credit. He must also submit a written thesis on a subject selected in consultation with a faculty adviser.

Graduate students of the institute will be under no obligation to the company nor will the company regard itself as obligated to such students.

Vocational Opportunities in the Industries of Ontario.

THE Ontario (Canada) Department of Labor is issuing a series of bulletins entitled "Vocational Opportunities in the Industries of Ontario."¹ Four of these bulletins have already appeared, No. 1, consisting of a general introduction to the series, and Nos. 2, 3, and 4 dealing, respectively, with surveys already made of department and notion stores, of dressmaking and millinery establishments, and of the garment-making industry. The surveys were authorized by the Government in 1918, which required employers, workers, and other persons to supply information concerning rates of wages, hours of labor, regularity of employment, and other matters.

In department and notion stores the work is said to be regular throughout the year for 75 per cent of the force. The proportion of workers receiving upwards of \$30 a week is given as 5.3, while about 41 per cent of the men and 2 per cent of the women receive \$20 or over and 30 per cent of the women receive \$12 or over.

In the report on dressmaking and millinery establishments it is stated that the former employment is well regularized, and that while the general level of wages is low the chances of earning \$25 a week are fairly good as compared with other employments open to women. In the millinery trade the proportion of those receiving \$15, \$20, \$25, and \$30 a week and over is said to compare favorably with those in other industries.

The garment-making industry is said to offer a field for a large number of workers. As to wages, it is stated that on the basis of the weekly wage there was a larger number of more highly paid workers in the manufacture of women's clothing than in men's in case of both men and women in 1917 and in 1918, but the work is usually more seasonal in the former. This industry offers splendid opportunities to those capable of becoming designers or executives. Of the employees, other than executives, in men's and women's factory clothing, 316, or 27.4 per cent, of the men and 27, or 9.6 per cent, of the women, were receiving a weekly wage of \$25 or more.

¹ Ontario. Department of Labor. Vocational opportunities in the industries of Ontario. A survey. Bulletins Nos. 1 to 4. Toronto, 1920. 25, 38, 23, 29 pp.

RELATIONS BETWEEN EMPLOYERS AND EMPLOYED.

The Portland (Oregon) Plan of Preventing Labor Disputes.

ON MAY 27, 1919, a joint agreement was adopted by the General Building Contractors' Association and the Building Trades Council of Portland, Oreg., after having been duly ratified by each labor union concerned, which, according to the manager of the Builders Exchange of that city, has "wiped out all strikes, lockouts, and stoppages of work and provided machinery for the handling of all disputes that might arise and also provided means whereby trouble might be anticipated and attacked before an open break occurred." The scheme is not Utopian, declares the manager, but it "has functioned, with the usual number of complaints arising, well along into its second year 90 per cent perfect or better." The records show that under its operation not one job has been struck, not one lockout recorded, no stoppage of work worth mentioning has occurred, not one dollar of loss on account of labor trouble to manufacturers of and dealers in building materials has been reported, and contracts with the building public have been fully carried out. Not all building contractors of the city are members of the association but all benefit by the agreement, and no provision is made in the agreement to take care of the effect on wages of the varying supply and demand of labor. These are admittedly weak points. It does not bar any man from work and permits union and nonunion men to work side by side. It, however, requires that if the union representing any trade can promptly supply competent men as needed these men shall be given the first chance to work.

The matter of the possible injustice to the nonunion man by reason of giving the union men the preference when available was carefully considered and it was concluded that in view of the well-recognized fact that the nonunion man held out for the same scale and the same hours that the unions had succeeded in establishing that there would be nothing essentially un-American in insisting that since he wanted all the unions had gained that he be expected to join them and contribute his share to the support of the council and thereby strengthen the work of the agreement.

Text of the Agreement.

THE success that has attended the working of the agreement has been due to three factors, in the opinion of the manager of the Builders Exchange: (1) The generally acknowledged attitude on the part of the employers to shoot straight with their men; (2) An exceptionally high grade lot of business agents; and (3) A very large percentage of home owners, citizens, and tax payers among the men themselves.

The agreement was to be in effect until May 1, 1920, but in the latter part of March both parties agreed to extend its provisions for another year, until May 1, 1921, or "until the adoption of a subsequent agreement." The following is the text of the agreement:

Agreement.

This agreement, made in duplicate and entered into this 27th day of May, 1919, by and between the General Building Contractors' Association of Portland, hereinafter designated party of the first part, and the Building Trades Council of Portland, hereinafter designated party of the second part,

Witnesseth:

1. That for and in consideration of the continuance of harmonious relations, and the maintenance of stability in the conditions of employment, and the continuance of mutually beneficial personal relations, and for the purpose of preventing strikes and lockouts by facilitating just and peaceful adjustments of disputes and grievances that may arise from time to time, between employers and employees, the parties hereto have agreed that the rules and regulations hereinafter set forth in this agreement shall be binding on all parties hereto, both severally and collectively.

2. Further: That both parties hereby agree that there shall be no strikes, lockouts, or stoppage of work without the sanction of the joint conference board, of which parties hereto are members, through their representatives, and that they will by all lawful means compel their members to comply with the arbitration agreement and working rules as jointly agreed upon and adopted, and that where a member or members, affiliated with either of the two parties to this agreement, refuse to do so, they shall be suspended from membership in the association or union to which they belong.

It is understood that on all buildings or jobs under construction, alteration, and repair, no member of the second part shall be deprived of his right as an individual to refuse to work in immediate conjunction with anyone in his own trade on any construction work which is not proceeding in accordance with the terms of this agreement and working rules mutually agreed on in his trade and with the terms of the joint agreement in force between the General Building Contractors' Association of Portland and the Building Trades Council of Portland.

3. *Principles upon which this agreement is based.*—Both parties hereto (this day) hereby adopt the following principles as an absolute basis for their joint agreement and working rules, and to govern the action of the arbitration board as hereinafter provided for:

(1) That there shall be no limitations as to the amount of work a man shall perform during a working day.

(2) That there shall be no restrictions of the use of machinery or tools.

(3) That no person shall have the right to interfere with workmen during working hours.

(4) That the use of apprentices shall be subject to the decision of the joint conference board.

(5) That the superintendent shall be the agent of the employer.

(6) That workmen are at liberty to work for whomsoever they see fit, but shall demand and receive the wages agreed upon by the joint conference board in their trade, under all circumstances.

(7) That workmen working for other than parties of the first part are not entitled to protection afforded by this agreement.

(8) That the party of the first part or any of its members will not lump, give out as piecework, contract, or subcontract brickwork, carpenter work, concrete work or labor. It is mutually understood that the provisions of this section shall in no way operate to prevent any member of the first party from taking bids on the items herein enumerated, provided (1) such bids are taken for the purpose of making up an original estimate, and provided (2) the party taking such bids shall not at the same time become a competitor of those from whom bids are asked by figuring the same work, and provided (3) that the work is awarded to the party whose bid is used in the general estimate.

(9) (a) That the party of the second part or any of its members will not lump, do piecework, or subcontract brickwork, carpenter work, concrete work or labor.

(b) That the party of the second part or any of its members will not work for any person or persons who contract or subcontract brickwork, carpenter work, concrete work or labor separately. It is mutually understood that nothing in the provisions of this section shall prevent a member of the second part from working for any person who makes his own complete estimate, but he shall not work for any person or persons who submits a bid on any work in his line after the contract has been awarded.

(10) That a workman of one craft may be required to do the work of another craft provided it does not exceed four hours, or until the workman of the proper craft arrives.

(11) That all parties will be bound by the several principles herein, and by decisions of the arbitration board and the joint conference board.

4. *Arbitration board.*—Both parties hereto agree that they will at their annual election each year elect an arbitration committee to serve for one year, or until their successors are elected and qualified. In case of death, expulsion, removal, or disqualification of a member, or members, of the arbitration board, such vacancy shall be filled by the association or council at its next regular meeting.

5. *Number of members.*—The arbitration board shall consist of ten members, five representatives from the party of the first part and five from the party of the second part, who shall within thirty days after the signing of this agreement, meet and elect a president, secretary, and treasurer. This board shall serve until May 1, 1920. Quorum shall consist of an equal number from each party to this agreement, but shall not be less than three from each party.

6. *Qualifications of members of the arbitration board.*—No member who is not engaged in the trade, or who holds a public office, either elective or appointive, under the municipal, county, State, or National Government, shall be eligible to act as the representative on this arbitration board; and any member shall become disqualified to act as a member thereof immediately upon his election or appointment to any public office or employment. This clause, however, may be waived by unanimous consent of the arbitration board.

7. *Umpire.*—An umpire shall be selected by the arbitration board as needed and who is in nowise connected with either party to this agreement.

8. *Power of board.*—The arbitration board shall have full power to enforce this agreement entered into between the parties hereto.

9. *Time of meeting.*—The arbitration board shall meet upon forty-eight hours' notice to transact business, upon written request of either party hereto.

10. *Rules of procedure.*—When a dispute or grievance arises between a journeyman and his employer (parties hereto), the question at issue shall be submitted in writing to the presidents of the two organizations, and upon their failure to meet within thirty-six hours and agree and settle it, or, if one party to the dispute is dissatisfied with the decision, it shall then be submitted to the arbitration board. The arbitration board shall hear the evidence and decide in accordance therewith. All verdicts shall be decided by majority vote, by secret ballot, to be rendered in writing and be final and binding upon both parties. If the arbitration board is unable to agree, the umpire shall be requested to sit with them, and after he has heard the evidence, cast the deciding vote. In the event of any dispute or grievance arising between the officers, business agents or individual members of the party of the second part and their employers (party of the first part), or their officials or individual members, for any cause whatsoever, there shall be no cessation or abandonment of the work on the part of either party to this agreement or any of their members, individually or collectively, but such grievance or dispute shall be settled as herein provided.

11. *Power to summon members.*—The arbitration board has the right to summon any member or members affiliated with either party hereto against whom complaint is lodged for violating this agreement or working rules, and also to appear as witness. The summons shall be handed to the president or secretary of the association or union to which the member belongs, and he shall cause the member or members to be notified to appear before the arbitration board on the date set. Failure to appear when notified except (in the opinion of the board) valid excuse is given, shall subject a member to an assessment of twenty-five dollars, for the first default, fifty dollars for the second, and suspension for the third.

12. *Stopping of work and penalties.*—No member or members affiliated with second party shall leave his or their work except as under provisions of section 2, under penalty of an assessment of not less than twenty-five dollars. Any member or members affiliated with either of the two parties hereto violating any part of this agreement or the working rules established by the joint conference board shall be subject to an assessment of from ten to two hundred dollars, which assessment shall be collected by the president of the association or union to which the offending member or members belong, and by him paid to the treasurer of the arbitration board not later than thirty days after the date of levying of the assessment.

13. *Collection of penalties and suspensions.*—If the assessment is not paid by the offender or offenders, it shall be paid out of the treasury of the association or union of which the offender or offenders were members at the time the assessment was levied against him or them within sixty days from date of levying same; or in lieu thereof the association or union to which he or they belong shall suspend the offender or offenders and officially certify such suspension to the arbitration board within ten days from the time of suspending, and the arbitration board shall cause a suspension decree to be read by the president of both association and the union at their next regular meeting. No one who has been suspended from membership in the associa-

tion or union for neglect or refusal to abide by the decision of the arbitration board can again be admitted to membership except by paying his assessment or by unanimous consent of the arbitration board. All assessments assessed by the arbitration board and collected during the year shall be equally divided between the two parties hereto by the arbitration board at the last regular meeting in April.

14. *Abandonment of work.*—The abandonment of work by the individual members of the party of the second part, either separately or collectively by concerted or separate action, on any building or buildings, being constructed by or for any member of party of the first part, will be considered a breach of this agreement, unless the party of the second part, upon demand, furnishes within twenty-four hours an equal number of competent men for such work.

15. *Scarcity of workmen.*—If after a thirty-six hour notice to the party of the second part they are unable to furnish all members of the party of the first part a required number of competent men, then the party of the first part shall be entitled to procure and employ the men required until party of the second part shall furnish same.

16. *Superintendent.*—The superintendent, if any, shall be selected by and be the agent of the employer. He shall be a competent mechanic in his trade, and subject to the terms of this agreement and its working rules and decisions of the arbitration board.

17. *Steward.*—The steward, if any, shall represent the journeymen. He shall be elected by and from among the men in his trade working on the same building or job, and shall, while acting as steward, be subject to the rules and decisions of the arbitration board. He shall not leave his work or interfere with workmen during working hours. He shall always, while at work, carry a copy of the working rules with him.

18. *Rights of presidents to visit jobs.*—The presidents of both parties hereto or their representatives, carrying proper credentials, shall be allowed to visit jobs during working hours to interview the contractor or steward, but shall in no way hinder the progress of the work or interview the men during working hours.

19. *Handling of tools, etc.*—The handling of all tools, etc., working machinery, and appliances shall be done by members parties to this agreement and helpers in the trade, who are using same in their work.

20. *Holidays.*—The following days (or days celebrated as such) shall be recognized as legal holidays: State and general elections, New Year's Day, Decoration Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day. No work shall be done on these days, except to protect life and property.

21. *Affiliations.*—Both parties to this agreement hereby agree that they will not affiliate or connect themselves with any other body whose rules or by-laws, now or in the future, conflict with this agreement.

22. *Conflicting rules.*—No by-laws or rules conflicting with this agreement or working rules agreed upon shall be passed or enforced by either party hereto against any of its affiliated members.

23. *Joint conference board.*—It is mutually agreed by the parties hereto that a joint conference board shall be established, consisting of three members, to be elected by the General Building Contractors' Association, of Portland, and three members by each union having representation in the Building Trades Council. This joint conference board shall meet on Monday of each week at 1.30 p. m. to talk over and consider methods of bettering conditions. Nothing transacted at this meeting shall be considered as final. Any suggestion for bettering conditions of the parties hereto, suggested by the joint conference board, can only be passed on finally as described below:

24. This joint conference board shall be subject to calls to settle wage and working rule adjustments only. The joint conference board shall meet whenever formally requested, either by the General Building Contractors' Association or the craft directly concerned, and shall have the power by a majority vote to authorize the requested adjustment, either in wages or working rules. It is provided, however, that no adjustments shall at any time change the then prevailing minimum rate of wages more than forty cents (40c.) per day of eight hours, and the said changes so decided upon shall become effective ninety days after date upon which said joint conference board shall vote such change. Working rule adjustments shall become effective immediately after adoption by the joint conference board. Only the three board members elected by the craft whose wage or working rule adjustment is under consideration shall sit with the three elected by the General Building Contractors' Association during the wage or working rule adjustment session. Action by the joint conference board shall not in any way alter this agreement. The wages (except as above provided), also rules and working conditions of employment prevailing on May first in each successive year shall continue for the ensuing year. Any request for change in

wages must be approved by the party of the second part before same may be presented to joint conference board.

25. *Working rules.*—It is agreed the working rules and wages as adopted by the joint conference board shall become a part of this agreement when signed by the president and secretary of each of the parties hereto.

26. *Jurisdiction.*—Multnomah County.

27. It is agreed by the parties hereto that this agreement shall remain in full force and effect until May 1, 1920. It is further agreed by the parties hereto that this agreement shall be signed in duplicate by the president and secretary of each of the organizations hereto.

The Rochester Plan of Industrial Democracy.

AN ACCOUNT of the plan evolved by the Clothiers' Exchange of Rochester and the Amalgamated Clothing Workers of America for the settlement of industrial disputes and problems is given by Meyer Jacobstein, labor manager for one of the clothing firms of that city, under the title "Can industrial democracy be efficient?" in the Bulletin of the Taylor Society (New York City) for August, 1920 (pp. 153-159).

It appears from this article that nearly two years ago at a time when there was industrial peace in the clothing industry in the city the first steps toward working out this plan were taken by members of the employers' association who expressed the desire for cooperation in effecting industrial stability to the president of the Amalgamated Clothing Workers. As at that time only about 25 per cent of the workers belonged to the amalgamated no attempt was made to conclude an agreement for the workers as a whole. In the agreement finally concluded between the employers and members of the union the employer's right to manage his own business and to operate on the open-shop principle with the understanding that union members were not to be discriminated against was conceded. The right of the management to introduce changes in the technique of manufacture as long as it did not interfere with the welfare of the workers and the right of the employer to secure continuous production were also recognized. To secure continuous production the union agreed to abandon the strike and in turn the employers surrendered the use of the lockout. The workers were conceded the right to organize and affiliate with an outside organization, to act collectively in dealing with employers, and to be represented by representatives of their own choosing, not necessarily from within the plant. These were the essential points in the agreement.

Machinery was necessary to make this agreement function, so the Clothiers' Exchange, a strong employers' organization, delegated to a labor committee composed of the heads of the five largest firms authority to shape its labor policies which in turn are administered by labor managers representing the 18 firms in the exchange. The labor managers are required to help shape the labor policies for the entire trade and in addition to administer these policies in their own factories, though most of them have the assistance of technical experts and standardization of employment procedure is secured through cooperative joint action by the labor managers.

On the workers' side there is equally good organization. The various crafts have their local unions which in turn are consolidated

into a joint board having a general manager, a staff of business agents, and the assistance of national organizers assigned to Rochester from national headquarters. The technical price committees of the workers meet with the employers' price committees.

In spite of the agreement it was recognized that with two strong organizations conflicts were likely to occur, so an impartial chairman is provided for who is chosen and financed by both sides. Whenever a disagreement can not be settled by the labor manager and business agent it is referred to the impartial chairman whose decision is final and binding on both parties. The constant interpretation which a constitution requires is provided for in the creation of a labor adjustment board which meets once a week and is presided over by the impartial chairman.

Some of the questions which come before the labor adjustment board and the impartial chairman are as follows: What is a fair piece rate on a given operation? What is a fair production standard for a weekly wage on a given operation? Has there been discrimination against a union worker? Has a worker been discharged arbitrarily and unreasonably by the employer? How shall an unruly worker be disciplined in the shop? How shall an unruly employer be disciplined by the worker? When work is slack shall the employer discharge help or give an equal distribution of work to all? Can the union compel an employer to discipline the violation of the union rule by a disobedient union worker? How shall women be paid on jobs ordinarily held by men? Has the employer a right to introduce a new machine or cause a change in the method of production in an operation?

It is stated that all these questions and many others have been settled satisfactorily by the new method and that the democratic plan of cooperation is building up a constructive leadership and trained citizens who are capable, efficient, and enlightened. On the other hand, there are still certain things lacking owing to the backward state of the industry such as a central production control system, routing and dispatching, and stores keeping or materials classification systems, but it is expected that the effects of the cooperative enterprise will be to prepare the way for scientific management. The experiment is still so young that it is impossible to predict its ultimate success with any degree of certainty but the writer of the article believes that the plan is built on correct principles and that they may expect to succeed in working out a plan which will be of value to all industries.

New Agreement Affecting Men's Clothing Industry in Rochester, N. Y.

THE agreement under which the clothing manufacturers and workers of Rochester have been working for a year expired on June 1, 1920. Pending the outcome of negotiations for a new agreement the old one was allowed to continue in force, thus making no break in the friendly cooperation between employers and workers. The new agreement is dated August 3, 1920, and was signed by representatives of the two parties after it had been ratified

by a referendum vote, in which every employee and every manufacturer had an opportunity to approve or disapprove it. The agreement continues in force until May 31, 1922, and is as follows:

Labor Agreement, Men's Clothing Industry, Rochester, N. Y.

1. This agreement made between the members of the Clothiers' Exchange of Rochester, New York, as individuals acting through the said exchange as their representative, and the Amalgamated Clothing Workers of America, shall become effective after ratification by the members of both parties, and the fact of such ratification shall be indicated by an exchange of notes between the president of the exchange and the president of the amalgamated. The agreement shall continue in force until May 31, 1922.

Handling of Grievances.

2. The right of the workers in the industry to bargain collectively is agreed to, and the Amalgamated Clothing Workers of America is recognized as the organization of the workers, duly authorized to act as the agency for collective dealing with the employers. The employees in every shop shall elect representatives to take up their cases with the management in the first instance. If the shop representatives can not agree with the management, then a union representative shall be called in. The employers shall appoint duly authorized representatives of the management, who shall be responsible for carrying into effect the terms and conditions of this agreement in all their shops.

Power of Hiring.

3. The power to hire shall remain with the employer, but in cases where discrimination on account of union membership is charged, the impartial chairman shall have the right of review; and if facts are brought before the impartial chairman that appear to indicate that the labor policy of any house is calculated to undermine the union, he shall have the power to review that policy.

Power of Discharging.

4. The power to discharge and suspend employees remains with the employer, but it is agreed that this power will be exercised with justice and due regard for the rights of the workers; and if any worker feels that he has been unjustly treated in the exercise of this power, he may appeal to the labor adjustment board hereinafter mentioned, which shall have the power of review in all such cases.

Changes in Shop Management.

5. The right of the employer to make changes in shop management and methods of manufacturing is recognized, such changes to be made without loss to the employees directly affected.

No Strikes or Lockouts.

6. There shall be no strikes, lockouts, or stoppages of work in any shop covered by this agreement.

Equal Division of Work.

7. The principle of equal division of work is recognized, and during slack seasons work shall be divided as far as practicable among all the workers in the shop.

Labor Adjustment Board.

8. The administration of this agreement is vested in a labor adjustment board, consisting of representatives of the employers and of representatives of the workmen, together with an impartial chairman selected by both parties. The representatives of the employers and the representatives of the workmen upon this board shall have an equal vote, regardless of the number of representatives of either side, and in case of a tie vote the impartial chairman shall cast the decisive vote. All disputes or differences over questions arising under this agreement which the parties hereto are

unable to adjust between themselves shall be referred to the labor adjustment board for adjustment or arbitration. This board shall have full and final jurisdiction over all such questions and its decisions shall be conclusive, except as may be otherwise provided by agreement of the parties hereto. Except where the board itself shall otherwise determine, the chairman of the board shall be authorized to take original jurisdiction of all cases and controversies arising under this agreement and to adjust or decide them in accordance with rules of practice and procedure established by the board. Decisions of the chairman shall be binding on both parties. It is agreed that William M. Leiserson shall continue to act as chairman of the labor adjustment board.

9. The board shall have authority to make such rules, regulations, and supplementary arrangements not inconsistent with this agreement as may be necessary to carry into effect the principles of this agreement or to apply these principles to new questions whenever they arise. It may also define, describe, and limit the penalties to be imposed for the violation of any of the provisions of this agreement.

10. The expenses of the labor adjustment board shall be borne equally by both parties to this agreement.

Changes in Wage Scales.

11. Upon the petition of either party the labor adjustment board shall have the power to determine whether important changes have taken place within the clothing industry, or in industrial conditions generally, which warrant changes in general wage levels or in hours of work; and if it is decided that such changes are warranted, negotiations shall begin between the parties hereto. In the event of a disagreement, the question shall be submitted to arbitration.

12. Upon the petition of either party, any adjustment of wages of individuals or sections that may be necessary in order to remove serious and unjust inequalities in pay may be made at any time during the life of this agreement, provided that no request for such adjustment shall be heard by the impartial chairman until he has been authorized to consider it by the labor adjustment board. A decision by the impartial chairman in such a matter shall take effect and operate during and after the first full work week after the date of the decision unless the parties otherwise agree.

Minimum Wage.

13. A minimum wage for all beginners in the industry and a probationary period during which the employer shall be free to discharge such help without question shall be fixed by the labor adjustment board.

Regular Working Hours.

14. The regular hours of work shall be forty-four per week, to be worked eight hours on the five days preceding Saturday and four hours on Saturday.

Payment for Overtime.

15. For work done in excess of the regular number of hours per day, overtime shall be paid at the rate of time and one-half.

Sanitary Control.

16. The labor adjustment board is authorized to exercise sanitary control over shops covered by this agreement, and it shall have authority to make regulations designed to protect the health and safety of the workers in the shops.

Abolition of Home Work.

17. It is agreed that home work shall be abolished and the labor adjustment board shall investigate and work out procedure to this end.

Application of the Golden Rule in Business.

A STRICT and literal application of the Golden Rule in the relations between employer and workers has been found in a large wholesale tailoring establishment in the Middle West. So closely is this old principle, laid down 1900 years ago, followed in this plant that, according to a communication to the Bureau from the management, while strikes and lowered production and high prices characterized industry in 1919 and the first half of 1920, this company experienced no strikes, increased its production over 1,000 per cent, and manufactured to order suits and overcoats to retail at from \$16.50 to \$29. Later, when the clothing industry became somewhat depressed, orders were canceled, factories closed, and price-cutting was practiced, this company during the first half of 1920 did \$81,000 worth more business than it did in 1919, and during the month of June, 1920, did a business equal to the entire year 1918. In July and August, considered a dull season for the wholesale tailoring business, the business of this company was only \$12,000 less than their biggest month's business notwithstanding the fact that the entire factory force was given a week's vacation. This result the management ascribes to the literal application of the Golden Rule, which "is really functioning and not being camouflaged," and has led to a condition where "our employees have at all times outdone the management in its application."

The Golden Rule is the divine law governing human relationships, accepted by all religions and proclaimed by all prophets and teachers of every creed. It is the only infallible, workable, industrial, and economic law in the universe to-day.

I do not say it has solved all labor troubles in our factory; nay, it has done more, it has eliminated all labor troubles during the most trying industrial period of the world's history. I do not say it has driven out hatred, strife and selfishness; it has done more, it has ushered in love, contentment, cooperation, and happiness; it has not only cast out hell, but has brought heaven to us.

In July, 1919, the company moved into larger quarters while a strike was in progress in the industry, and at once increased its working force 600 per cent and its production over 1,000 per cent, the additional workers being brought in by the employees themselves who told their friends of the desirable working conditions and wages existing as a result of the Golden Rule plan. Following this increase a profit-sharing scheme was proposed by the management but the employees refused to accept it, stating that they were willing to leave to the management the matter of figuring out what they could pay as a weekly wage. Several wage increases were made in 1919, none of which was made as the result of demands or in concert with the market, but each was based on the increase in production. At the end of 1919, in spite of the wage advances, the company found itself with a net profit of \$42,000, on an investment of \$60,000. "The actual condition at that time," states the management, "was that we were paying bigger wages, selling our product for less money, and making a greater profit than any of our associates in business." The workers were told of the large profits. "We felt greatly chagrined, because it is our belief that this is an unjustifiable profit to make off of the labor of others; we frankly told our help so." To absorb this large sum another increase in wages ranging from 10

to 20 per cent was put into effect. Under changed conditions, with a greatly increased force, it was found to be almost impossible to figure what each worker was producing and so the profit-sharing basis of arriving at a just wage scale was again proposed to the workers and unanimously accepted.

Application of Golden Rule by Employees.

UNDER this profit-sharing plan profits were to be divided twice each year upon the basis of earnings. Quite to the surprise of the president of the company, under stimulation of the Golden Rule the employees a few days after the adoption of the plan laid upon his desk the following petition signed by men and women earning more than \$60 a week:

Realizing that the ——— company is using every effort to be truly just and democratic, and realizing that in making the final adjustment of wages on the profit-sharing basis a very large share of this final payment, as at present intended, would go to those making big wages, and heartily agreeing with the management that it is not just that the lion's share of the profits should go to any individual, or small group of individuals, we, the undersigned, all of whom are drawing a weekly wage of over sixty dollars (\$60), do hereby petition the management of the ——— company to distribute the workers' share of profits, which is to be distributed July 1, 1920, on the basis of time worked instead of on the basis of wages drawn.

This will give those making the smaller wage an equal dividend with those making the larger one, and we believe is not only needed by them, but is just and in keeping with the policy of our company. We are sure this will be appreciated by all the help.

This petition meant, comments the president of the company, that the highly paid help, who under the plan as adopted would have received six or seven times as much as the old employees or the beginners, a result which they felt was not fair under the Golden Rule principle, had voluntarily asked that all should receive the same dividend—a dividend based on time worked rather than on earnings. When the first dividend was distributed every employee received a little over \$3.50 for each week's work.

As to the increased volume of business during the period of stagnation and price cutting, the president of the company makes the following comment:

When we decided to make the Golden Rule our governing law it was impressed upon every mind that doing to others as we would be done by did not simply mean employer and employee, but meant each customer on our books as well; it meant that every garment we sold must be of a standard that we would be willing to accept, and sold at a price that we would be willing to pay if we were in the customer's place; it meant that our help saw behind each order a fellow human being whom they wanted to deal with as they would want to be dealt with.

It was an honest effort at applying the Golden Rule that fixed our prices during the 1919 orgy of high prices and profiteering.

The long-suffering public was conscious of these facts and while others were losing the confidence of the public we were gaining their confidence, so that when the time came that the public went on a nonbuying strike we were no more affected by that strike than we were when the laborers went on a strike, because in applying the Golden Rule, dealing justly with the public, we had won their confidence in the same way we had won the confidence of our employees.

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in October, 1920.

THE Bureau of Labor Statistics received and tabulated reports concerning the volume of employment in October, 1920, from representative establishments in 13 selected manufacturing industries and in bituminous coal mining.

Comparing the figures of October, 1920, with those of identical establishments for October, 1919, it appears that in 4 industries there were increases in the number of persons employed. The largest increase, 57.3 per cent, appears in iron and steel. Ten industries show decreases, the greatest being 33.6 per cent in the woolen industry, and 26.8 per cent in both hosiery and underwear, and leather. The smallest decrease, 1.9 per cent, is shown in cotton manufacturing. The large increase in the iron and steel industry in October, 1920, when compared with October, 1919, is due to improved industrial conditions following a period of strikes.

When compared with October, 1919, the amount of the pay rolls in October, 1920, show increases in 7 industries. The greatest increases, 85.3 per cent and 59.6 per cent, appear in iron and steel, and car building and repairing, respectively, while 1.8 per cent, the smallest increase, is shown in cotton manufacturing. Boots and shoes show a decrease of 28.4 per cent and hosiery and underwear a decrease of 21.9 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN OCTOBER, 1919,
AND OCTOBER, 1920.

Industry.	Estab- lish- ments report- ing for Octo- ber both years.	Period of pay roll.	Number on pay roll.			Amount of pay roll.		
			Octo- ber, 1919.	Octo- ber, 1920.	Per cent of in- crease (+) or de- crease (-).	October, 1919.	October, 1920.	Per cent of in- crease (+) or de- crease (-).
Iron and steel.....	108	1/2 mo....	117, 139	184, 251	+57.3	\$7,960,627	\$14,749,512	+85.3
Automobile manufacturing..	45	1 wk....	160,413	124,276	-22.5	5,173,645	4,559,967	-11.9
Car building and repairing..	43	1/2 mo....	40,245	50,808	+26.2	2,450,526	3,910,982	+59.6
Cotton manufacturing.....	54	1 wk....	51,016	50,023	-1.9	881,045	896,937	+1.8
Cotton finishing.....	16	do....	12,290	9,992	-18.7	260,897	226,415	-13.2
Hosiery and underwear.....	59	do....	29,329	21,479	-26.8	497,449	388,385	-21.9
Woolen.....	52	do....	50,475	33,495	-33.6	1,030,209	749,526	-27.2
Silk.....	46	2 wks....	19,057	17,820	-6.5	794,349	810,899	+2.1
Men's ready-made clothing..	43	1 wk....	25,945	24,447	-5.8	771,576	729,089	-5.5
Leather manufacturing.....	31	do....	17,255	12,630	-26.8	427,184	336,294	-21.3
Boots and shoes.....	84	do....	69,093	51,825	-25.0	1,554,394	1,112,886	-28.4
Paper making.....	55	do....	29,864	33,022	+10.6	740,699	998,616	+34.8
Cigar manufacturing.....	49	do....	14,429	15,577	+8.0	271,039	337,164	+24.4
Coal mining (bituminous)...	59	1/2 mo....	17,582	16,586	-5.7	1,136,488	1,518,019	+33.6

Comparative data for October, 1920, and September, 1920, appear in the following table. The figures show that in one industry there was an increase in the number of persons on the pay roll in October as compared with September, and in 13, a decrease. The increase, 4.3 per cent, appears in the woolen industry. Percentage decreases of 14.6 and 12.4 are shown in men's ready-made clothing and automobiles.

When comparing October, 1920, with September, 1920, 5 industries show an increase in the amount of money paid to employees and 9 show a decrease. The most important increase, 10.1 per cent, occurs in coal mining. Respective decreases of 23 per cent and 17.5 per cent appear in cotton manufacturing and cotton finishing, while the decrease shown in silk is less than one-tenth of 1 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN SEPTEMBER AND OCTOBER, 1920.

Industry.	Establishments reporting for September and October.	Period of pay roll.	Number on pay roll.			Amount of pay roll.		
			September, 1920.	October, 1920.	Per cent of increase (+) or decrease (-).	September, 1920.	October, 1920.	Per cent of increase (+) or decrease (-).
Iron and steel.....	105	½ mo....	182,989	182,910	(¹)	\$14,184,035	\$14,682,365	+ 3.5
Automobile manufacturing.	47	1 wk....	135,828	118,970	-12.4	4,691,378	4,447,376	- 5.2
Car building and repairing.	40	½ mo....	48,307	47,498	- 1.7	3,545,847	3,606,515	+ 3.4
Cotton manufacturing.....	53	1 wk....	49,835	48,855	- 2.0	1,140,438	878,561	-23.0
Cotton finishing.....	17	...do....	11,705	10,457	-10.7	237,161	236,900	-17.5
Hosiery and underwear....	59	...do....	23,529	21,060	-10.5	457,864	385,229	-15.9
Woolen.....	51	...do....	32,072	33,439	+ 4.3	804,743	747,935	- 7.1
Silk.....	46	2 wks....	18,139	17,820	- 1.8	810,978	810,899	(¹)
Men's ready-made clothing.	42	1 wk....	25,635	21,892	-14.6	743,188	643,413	-13.4
Leather manufacturing.....	32	...do....	12,447	11,798	- 5.2	307,696	306,614	- .4
Boots and shoes.....	75	...do....	46,517	44,461	- 4.4	1,099,367	961,387	-12.6
Paper making.....	56	...do....	33,864	33,814	- .1	1,013,042	1,025,030	+ 1.2
Cigar manufacturing.....	52	...do....	16,054	15,958	- .6	341,791	345,120	+ 1.0
Coal mining (bituminous)...	75	½ mo....	20,154	20,106	- .2	1,647,601	1,814,237	+10.1

¹ Decrease of less than one-tenth of 1 per cent.

In addition to the data presented in the above tables as to the number of employees on the pay roll, 85 plants in the iron and steel industry reported 141,437 employees as actually working on the last full day of the pay-roll period reported for October, 1920, as against 87,567 for the reported pay-roll period in October, 1919, an increase of 61.5 per cent. Figures given by 83 establishments in the iron and steel industry for October, 1920, and September, 1920, show that 144,512 employees were actually working on the last full day of the pay period reported for in October, 1920, as against 145,535 for the same period in September, 1920, a decrease of 0.7 per cent.

Wage Changes.

IN 7 of the 14 industries there were establishments reporting wage rate increases during the period September 15 to October 15, 1920, while a firm in one of these industries reported a decrease. Of the establishments reporting, many did not answer the inquiry relative to this item, but in such cases it is not likely that changes were made.

Iron and steel.—About 8 per cent of the force in one plant were granted an increase of 10 per cent, and 95 per cent of the men in another plant received an increase of 7 per cent. Five establishments reported a wage rate increase of approximately 7 per cent, but the percentage of employees affected was not stated. The entire force in three mills received an increase of 6 per cent. Two concerns gave an increase of 5 per cent, affecting 75 per cent of the employees in one concern and 40 per cent in the other. An increase of 4.4 per cent was granted to approximately 9 per cent of the men in one establishment.

Automobiles.—One plant granted an increase of 4 per cent to 7 per cent of the force. A decrease of about 10 per cent was reported by one establishment affecting the entire force.

Car building and repairing.—One shop granted a 4 per cent increase to 2 per cent of the employees.

Cotton finishing.—One establishment gave an increase of 20 per cent to 10 per cent of the men.

Boots and shoes.—An increase of 9½ per cent was given to about one per cent of the men in one factory and another factory reported an increase of 5 per cent, affecting 5 per cent of the men.

Paper.—An increase of 5.1 per cent was granted by one mill to 3.3 per cent of the employees, while another mill granted a 4 per cent increase to 2.5 per cent of the employees.

Bituminous coal.—One mine gave an increase of 35 per cent to 50 per cent of the men, and another mine granted a 26 per cent increase to 46 per cent of the men. An increase of approximately 25 per cent was given by two mines, but the number of men affected was not reported. The entire force of two concerns was granted wage rate increases of 23 per cent and 12½ per cent respectively. The day laborers in one mine received an increase of 15 per cent. One mine reported an increase of \$1.50 per day to all day men and \$35 per month to all monthly men. Five mines granted an increase of \$1.50 per day, affecting 50 per cent of the force in 3 mines, and all day laborers in 2 mines. Three concerns reported a percentage increase of 13, affecting 59 per cent, 53 per cent, and 50 per cent of the employees respectively.

Annual Meeting of the American Association of Public Employment Offices.¹

THE eighth annual meeting of the American Association of Public Employment Offices was held at Ottawa, Canada, September 20 to 22, 1920. Among the topics for discussion on the opening day were the value of detailed studies of the labor market as brought out by an examination of Canadian employment statistics, and the necessity for proportionate national development as a means of stabilizing employment, it being urged that "matters connected with production should be the subject of continuous study by the trade, employment, and commercial experts of every country." The policy of regularizing national demand for labor by Government employment was advocated. Two papers dealt, respectively, with

¹ Source: The Labor Gazette, Ottawa, October, 1920, pp. 1358-1362.

the handling of immigration by the public employment service and with the trade-union point of view as to the fundamental principle to be followed with reference to the importation of labor. Other subjects taken up at the first day's proceedings were: The Russell Sage study of public employment service; the trade-union and managerial viewpoints of the public employment service; the importance of studying employment and all labor problems as market phenomena; the trend toward centralization and standardization in public employment service in the United States; scientific management and the reduction of unemployment; unemployment insurance; the unrealized possibilities of research as a factor in industrial relations; and long-shore employment, including suggested plans for its regularization and decasualization.

The second day was devoted to employment problems relating to juvenile and professional workers and handicapped persons. The interrelations of employment and education were pointed out, and the need for juvenile work in the employment offices and for educational and research work in the administration of employment service for professional women was emphasized. A national clearance system was suggested for the employment of public health nurses. One of the addresses was on the university employment bureau. The placing of the crippled and handicapped was discussed by a number of speakers, with first-hand knowledge of the subject, who were unanimously agreed that such placement "called for special attention and special organization."

The harvest labor problem was the subject of a round-table conference.

On the closing day of the convention consideration was given to employment office administration and technique, including such matters as job analysis and specifications in placement work, the possibilities of psychological tests in discovering vocational aptitudes, the value of advisory committees and the importance of the clearance function.

An important result of the business session was the decision to change the name of the organization to International Association of Public Employment Services, and the adoption of the following objects of the association:

1. To promote a system or systems of employment exchanges in the United States and Canada.
2. To advance the study of employment problems.
3. To bring into closer association and to coordinate the efforts of Government officials and others engaged or interested in questions relating to employment, unemployment, and the organization of the labor market.

The names of the officers for the coming year are as follows:

President, Mr. Bryce M. Stewart, Director of Employment Service, Department of Labor of Canada, Ottawa, Canada; first vice president, Mr. A. W. Holbrook, superintendent of the Ohio State Employment Bureau, Dayton, Ohio; second vice president, Mr. Harry Dunderdale, of the Massachusetts State Employment Service, Boston, Mass.; third vice president, Mr. John M. Sullivan, zone clearance officer for the Chicago district, Federal Employment Service, Chicago, Ill.; secretary-treasurer, Mr. R. A. Flinn, of the New York State Employment Service.

It was decided to hold the 1921 meeting in Buffalo, N. Y.

Decline in Employment in New York State Factories.

ACCORDING to statements received from the New York State Industrial Commission, the highest peak of employment reached in that State for the last six years was in March, 1920. A downward trend, however, started last April with a reduction of 1 per cent, resulting principally from the switchmen's strike. In May there was an additional drop of 2 per cent. Very little change took place in June, but in August, September, and October¹ there was a decline of 2 per cent each month, the total decrease in employment during the seven months from March to October, amounting to 9 per cent.

From September to October reductions in employment appear in the majority of the industries of the State. With the exception of a few seasonal decreases, most of the reductions reported are the result of the prevailing depression in business. In a few industries the decreases in employment during October and the preceding months have already assumed considerable proportions. In many industries, however, the reductions are of recent origin and so far have taken the form of a slow and gradual readjustment. Several branches of manufacturing still report a high level of operations, but indications point to a decrease in some of these in the near future. A few industries report seasonal increases.

The following table gives some of the industries in which the business depression is most strikingly reflected, together with the percentage reduction of employment during the periods indicated:

PER CENT OF REDUCTION IN EMPLOYMENT IN NEW YORK STATE FACTORIES.

Industry.	Per cent of reduction in employment.		
	During October, 1920.	From month specified to October 31, 1920.	
		Month.	Per cent.
Automobile.....	10	March, 1920.....	42
Boots and shoes.....	2	.....do.....	22
Cotton and woolen knit goods.....	26	April, 1920.....	44
Cotton goods.....	5	March, 1920.....	20
Firearms and cutlery.....	2	.....do.....	18
Heating apparatus.....	4	July, 1920.....	12
Leather industry.....	4	January, 1920.....	22
Men's clothing.....	5	April, 1920.....	20
Wool manufactures.....	3	March, 1920.....	16

The Wisconsin Labor Market.

THE statistical department of the Industrial Commission of Wisconsin has recently begun the collection and compilation of statistics concerning employment and earnings in that State. The first report is presented below in full, not only for its general interest but also because it may be of assistance to labor bureaus and commissions in other States in the establishment of a like line of work. The report in subject matter is quite like the "New York Labor Market Bulletin" which was started by the New York Bureau of Statistics and Information in 1915. It is to be hoped that other

¹ Percentage for October based on preliminary tabulation of more than 1,600 factory reports.

States may see the importance of information of this character and undertake the issuing of like reports.

The Industrial Commission has decided to collect monthly data concerning employment conditions in the State. It will utilize for this purpose monthly reports of employers who have been granted permission to carry their own risk under the workmen's compensation act. These are the larger corporations doing business in the State. In addition, a small number of other representative employers have consented to make monthly reports, so that all industries will be represented in due proportion to their importance.

Altogether 170 employers, with 80,000 shop employees and a weekly pay roll of \$2,500,000, are reporting. These employers have in their employ between 25 per cent and 30 per cent of the total number of factory employees in the State. Therefore the reports, properly tabulated, will furnish a very accurate index of employment conditions.

While reports will be secured covering office as well as shop employees, only data covering shop employees will be tabulated monthly. The office pay roll sometimes includes highly paid officials and sometimes does not, it being hard to draw the line between an official and an employee. Moreover, office employees are not affected by changing industrial conditions in the same degree as shop employees, so that data covering office employees would not afford as sensitive an index of industrial conditions.

In order to afford a rough index of employment conditions in the past, quarterly reports of employers carrying their own risk under the workmen's compensation act were analyzed. The pay rolls of the employers whose reports were used included between 15 per cent and 20 per cent of the factory workers of the State. Inasmuch as the reports used were intended for a different purpose the index down to July, 1920, should be taken as an approximation only.

The first chart (p. 110) shows the change in the total number of factory employees and total wages paid since January, 1915. It shows that the total number of wage earners in the State was 43 per cent more in July, 1920, than in the first quarter of 1915. It also shows that there was an increase in the total pay roll of 257 per cent. It will be seen that the number employed did not fall off until five or six months after the armistice was signed in November, 1918. However, reports from the State employment office showed an immediate decrease in the number of placements, indicating that the high labor turnover came to an end at once.

The second chart (p. 111) compares average earnings with food prices. One is immediately struck by the great increase in earnings compared with food prices. It must be remembered, however, that the first part of 1915 was a period of depression, so that average earnings were very low at that time (according to data here presented, between \$11.50 and \$12 a week). Therefore the great increase in earnings does not mean so much as if it were based on a normal period. The food prices were obtained from the United States Bureau of Labor Statistics.

The charts show conditions up to and including July, 1920. Data collected for the months of July and August are presented in the table on page 112. The first two columns of the table show the changes in number of employees and wages paid in August as compared with July. The total number employed declined 0.8 per cent, but total wages increased 7.2 per cent, more than recovering the July decline noticeable in the first chart. In fact, total wages paid in August were 283 per cent greater than in the first quarter of 1915. A considerable increase in the number employed took place in stone crushing and quarrying, and in stone finishing, due to improvement in transportation facilities.

The woodworking industry is recovering from the effects of the strike which affected operations in the northern part of the State. This is shown by the large increase in the number of operatives in sawmills and planing mills, and box factories, although there were slight decreases in some of the other woodworking industries.

Tanning, hosiery and other knit goods, and milk products showed considerable fewer workers. These industries were affected greatly by demoralized market conditions. However, there was some recovery in boots and shoes and in clothing. Wisconsin shoe factories were not so seriously affected by the break in the leather market as those in the East, due to the fact that most of them make a lower-priced shoe.

All in all, industrial conditions are somewhat unsettled. Preliminary estimates for September indicate that the number of employees will be between 3 per cent and 4 per cent less than in August, and that total wages paid will be at least 7 per cent less. However, Wisconsin has not been hit anywhere near as hard as the Eastern States by the present depression, due chiefly to her diversified industries.

CHART A.—INDEX OF EMPLOYMENT IN WISCONSIN FACTORIES.

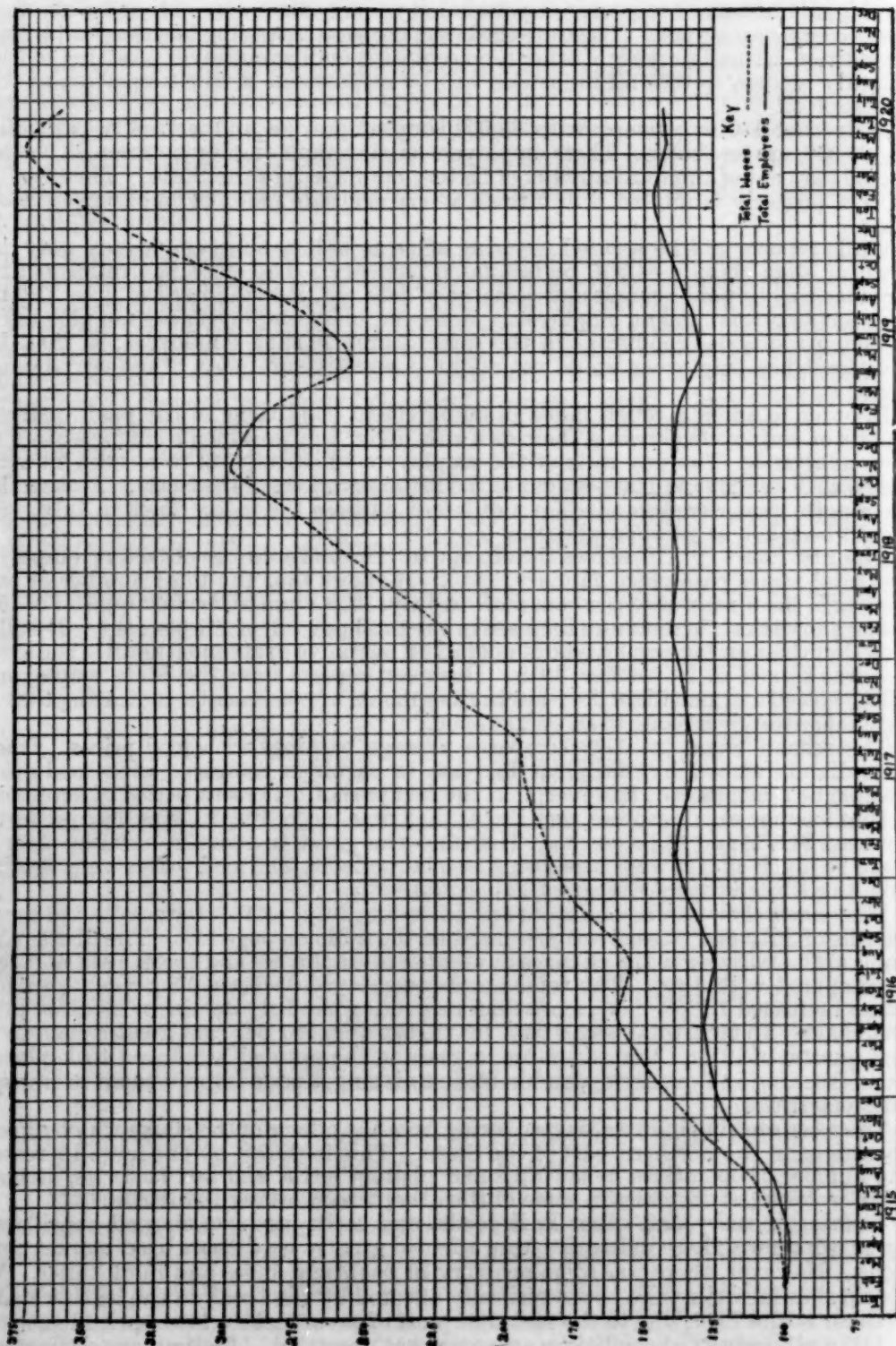
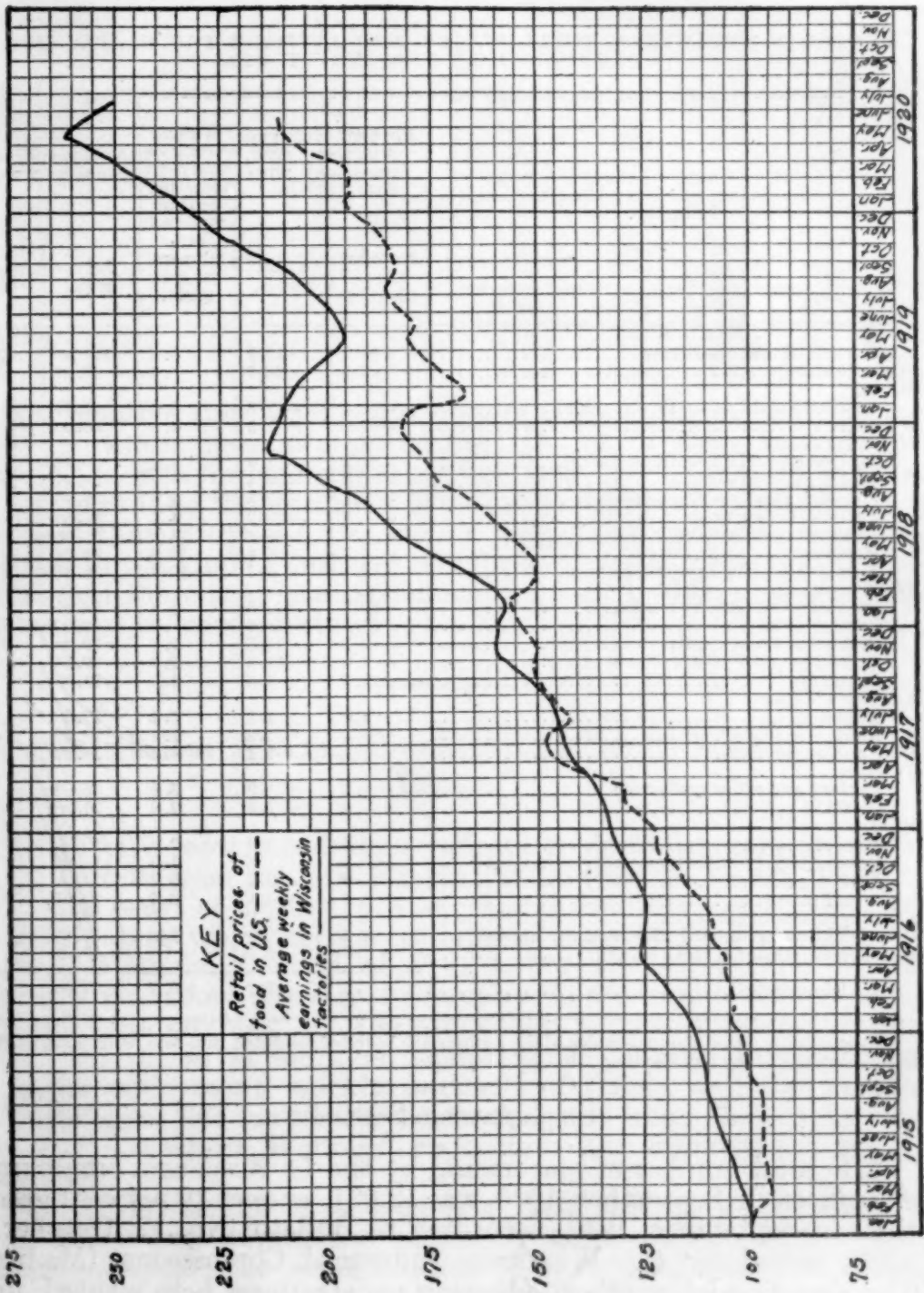


CHART B.—COMPARISON OF AVERAGE WEEKLY EARNINGS IN WISCONSIN FACTORIES WITH FOOD PRICES IN THE UNITED STATES.



The last two columns of the table show average weekly earnings for July and August in the different industries. There was a large increase in the earnings of railroad repair-shop employees for August, due to the United States Railroad Labor Board's decision of July 20. In the other industries there were higher earnings in August for the most part, due to the great improvement in railroad facilities which enabled factories to work full time. It is certain, however, that average earnings in September declined, although a tabulation by industries can not be made until all reports are in.

CHANGES IN EMPLOYEES, TOTAL WAGES, AND AVERAGE PER CAPITA WEEKLY EARNINGS, JULY AND AUGUST, 1920.¹

Industry.	Percent of change August, 1920, compared with July, 1920, in—		Weight of each in- dustry in total (per cent of reported em- ployees in Au- gust).	Average per capita weekly earnings.	
	Number of em- ployees.	Total wages.		July, 1920.	August, 1920.
Stone crushing and quarrying	+10.9	+19.1	0.4	\$25.91	\$27.82
Stone finishing	+13.1	+20.7	.7	27.97	28.89
Mining:					
Lead and zinc	+ 4.4	- 2.8	1.0	31.77	29.60
Iron	- .6	+ 7.3	1.3	30.66	33.10
Metal working:					
Pig-iron and rolling-mill products	+ 1.8	- 1.9	2.2	39.78	38.33
Structural-iron work	+ 1.5	+19.4	.7	28.91	34.01
Foundries and machine shops	+ 4.8	+12.3	3.3	32.95	35.28
Railroad repair shops	- .5	+20.2	4.7	31.54	38.10
Stamped metal goods	+ .4	+13.9	4.8	22.33	25.35
Machinery	- 4.7	+ 6.4	23.0	30.54	34.09
Automobiles and motor cycles	- 4.1	+ 6.7	10.2	32.30	35.92
Woodworking:					
Sawmills and planing mills	+29.7	+25.5	4.8	24.07	23.29
Box factories	+56.5	+56.1	.9	23.90	23.81
Panel and veneer mills	- 2.7	+10.3	1.4	20.48	23.21
Sash, door, and interior finish	- 1.9	+11.2	2.3	22.58	25.61
Furniture	- 1.9	+ 3.5	4.3	21.55	22.74
Leather working:					
Tanning	- 6.0	- 4.2	5.4	27.40	27.91
Boots and shoes	+ 4.4	+ .2	3.2	21.15	20.30
Pulp and paper	- 4.1	+ 9.2	6.3	29.80	33.97
Textiles:					
Hosiery and other knit goods	- 4.2	+ 1.9	3.3	16.69	17.76
Clothing	+ 8.4	+ 5.6	2.8	21.08	20.08
Food:					
Meat	- 3.4	- 3.8	2.6	29.85	29.73
Baking and confectionery	+ .7	+ 1.8	1.9	18.90	18.87
Milk products	-10.9	- 3.2	2.7	24.82	26.97
Light and power	+ 2.6	+ 4.7	2.5	29.02	29.61
Printing and publishing	+ 1.8	+ 1.2	.7	29.90	29.72
Chemicals (including soap, glue, and explosives)	- 1.3	+10.0	2.1	28.94	32.26
Laundering, cleaning, and dyeing	- 1.6	+10.7	.5	17.91	20.15
All industries	- .8	+ 7.2	100.0	27.84	30.06

¹ To economize space the two tables of the reports are here consolidated into one, with a slight change in the wording of the box heading.

Employment in September.

THE total number of placements by the 11 Wisconsin employment offices in September, 1920, was 12,021, or over 70 per cent greater than in September, 1919, according to Bulletin No. 12, October 18, 1920, issued by the Wisconsin Industrial Commission (Madison). The classified labor report, showing registrations, help wanted, numbers referred to positions, and numbers placed, is as follows:

CLASSIFIED REPORT OF EMPLOYMENT OFFICES IN WISCONSIN FOR SEPTEMBER, 1920.

Sex, and class of work.	Number of registrations.	Number of applications for help.	Number referred to positions.	Reported placed.	
				Number.	Per cent of registrations.
Males:					
Unskilled.....	10,499	12,218	10,221	9,531	90.8
Skilled.....	1,870	2,442	1,728	1,130	60.4
Clerical.....	165	152	141	70	42.4
Total.....	12,534	14,812	12,090	10,731	85.6
Females:					
Domestic.....	1,207	2,630	1,279	958	79.4
Industrial.....	251	356	237	163	64.9
Clerical.....	431	274	371	169	39.2
Total.....	1,889	3,260	1,887	1,290	68.3
Grand total.....	14,423	18,072	13,977	12,021	83.3

It is reported that there is a surplus of labor in Racine and Sheboygan. However, generally throughout the State there is a distinct shortage of men for common labor, but little call for factory workers. According to the Bulletin there has been an increased demand during the past three months for women as casual help and domestics and for men in the lumber industry and for road work. The same report states that there is a decreased demand in the building trades, metal trades, and in woodworking.

Recommendations Affecting Employment of Dock Workers in Great Britain.¹

CERTAIN recommendations affecting dock workers in Great Britain were made in a report² submitted in March, 1920, by the court of inquiry into wages and conditions of employment of dock labor, which recommendations were adopted by the Provisional National Council of Port Labor Employers and by the National Transport Workers' Federation, in the form of an agreement entered into on May 5. Certain other points, however, dealing with registration of workers, maintenance during unemployment or underemployment, weekly payment of wages, and the working of shifts, were left for further discussion, and upon these points the National Transport Workers' Federation has submitted a memorandum.

The establishment of a complete shift system is regarded as unnecessary and impracticable; weekly payment of wages is considered essential; the establishment of a clearing house is recommended, the threefold purpose being (1) to check surplus labor, (2) payment of wages, and (3) "maintenance," as described below. The registration of workers is considered very important. The

¹ Data taken from Labor Gazette (London) for October, 1920, pp. 542, 543.

² See MONTHLY LABOR REVIEW for May, 1920, pp. 54 to 62.

use of the "tally" should be enforced nationally, it is stated. In reviewing the recommendations the Labor Gazette suggests in this connection:

No employer should be permitted to employ a man without a tally; and the conditions of holding a tally would be (i) that the man is duly registered, and (ii) that his registration is confirmed by a joint committee. Much importance is attached to these joint committees, of which (under the Federation's scheme) there would be one in each port, with a number of subcommittees in the larger ports, as well as a national committee to supervise the scheme over the whole industry. In addition to the actual supervision of income and expenditure by these committees, they should be charged with the duty of investigating complaints, or hearing appeals by men against any decision of the clearing house officials. The unions should be prepared to undertake these investigations, and to assist in the administration of the scheme; and the employers on their side (as mentioned above) should accept the principle that, to obtain a tally or to be a member of the scheme, membership of a union is essential.

As to maintenance the Federation suggests that each casual workman engaged as a dock worker shall receive a guaranteed minimum wage of £4 (\$19.47, par) a week (equivalent to 16s. (\$3.89, par) a day for five days in the week), each week to stand by itself. The Federation estimates the cost of the scheme of maintenance at £2,600,000 (\$12,652,900, par) without the cost of administration, which it is suggested the Government should bear up to the amount it will expend under the unemployment insurance act, 1920. This total sum the Federation proposes to raise by a flat rate charge of 4d. (8.1 cents, par) a ton on all imports and exports exclusive of export coal, which it is estimated would yield about £2,843,000 (\$13,835,460, par) annually.

Employment and Wages in Argentina.

THE Argentine Department of Labor has recently published¹ information concerning employment and wages in that country. It is stated that in August, 1919, the total number of employed workmen in the Federal capital was 359,881, the largest number since August, 1914. The smallest number employed during the intervening period was 292,840 in August, 1917. The following table gives the ratio of the number of employed workmen to the population of the city above the age of 14 years:

PROPORTION NUMBER OF EMPLOYED WORKMEN BORE TO THE POPULATION OVER 14 YEARS OF AGE IN BUENOS AIRES IN AUGUST OF SPECIFIED YEARS.

Year.	Population over 14 years.	Employed workmen.	Per cent employed.
1914.....	1,165,040	343,984	29.5
1915.....	1,180,222	337,882	28.6
1916.....	1,191,840	312,997	27.0
1917.....	1,198,727	292,840	24.4
1918.....	1,211,495	335,239	27.7
1919.....	1,221,455	359,881	29.5

¹ Cronica Mensual del Departamento Nacional del Trabajo. Buenos Aires, Agosto de 1920. Pp. 511, 512, 516-518.

It is stated that the figures for 1915, 1916, and 1917 show the effects of the smaller foreign immigration and an excess of emigration of the useful elements of the population either for military service or because of higher wages elsewhere, and also reflect the efforts of the Argentine industries to supply the lack of imported goods, in order to satisfy both home and foreign demands.

The report of the National Employment Office shows that the actual placements during the period 1915 to 1919 (six months) total 106,258 persons of both sexes, distributed by years as follows:

Year.	Placements.
1915.....	32,061
1916.....	22,863
1917.....	16,983
1918.....	23,104
1919 (six months).....	11,247
Total.....	106,258

The information concerning wages is based on the actual placements above mentioned. The workers are grouped as follows: Craft workers, classified by industries; laborers; and domestic servants of both sexes.

In the ready-made clothing and textile industry the wages for those placed range from 1.15 pesos (\$1.11, par) per day for seamstresses to 6 pesos (\$5.79, par) for mattress makers and tailors.

The building industry was reported to be very dull and very few workers were placed. In the lumber industry carpenters' wages ranged between 4 and 5 pesos (\$3.86 and \$4.82, par) per day. However, in the first half of this year they advanced to 6 and 7 pesos (\$5.79 and \$6.75, par), with increasing demand for such service. The coopers were placed at from 4 to 4.50 pesos (\$3.86 to \$4.34, par) per day, until increased demand and a limited supply caused an advance to 6 and 8 pesos (\$5.79 and \$7.72, par).

In the metal industry the greatest demand was for ironworkers, mechanics, and turners. Their wages ranged from 3 to 7 pesos (\$2.89 to \$6.75, par), according to skill and accuracy.

The daily rates of wages in the miscellaneous group ranged from 1.60 pesos (\$1.54, par) for apprentices to 5 pesos (\$4.82, par) for foremen. The monthly rates varied from 30 to 45 pesos (\$28.94 to \$43.42, par) for messengers to 100 pesos (\$96.48, par) for distributors. Head grooms were paid 75 to 100 pesos (\$72.36 to \$96.48, par), usually the former. Oftentimes maintenance and lodging are given in addition to wages. The wages of track laborers rose from 1.40 pesos (\$1.35, par) in 1917 to 1.60 and 2.20 pesos (\$1.54 and \$2.12, par) in 1918, occasionally going as high as 2.50 and 3 pesos (\$2.41 and \$2.89, par). In 1919 their wage varied from 1.80 and 2 pesos (\$1.74 and \$1.93, par) to 2.50 pesos (\$2.41, par), the latter being most usual. Occasionally as high as 3 and 4 pesos (\$2.89 and \$3.86, par) were paid. The wages of common laborers varied considerably, those who received house and food in addition to wages being paid an average of 70 pesos (\$67.54, par) per month in 1919. For other classes of laborers little change was noted, though in a few cases wages advanced slightly.

The wages of domestic servants of both sexes increased considerably owing to the scarcity of unemployed servants, due to the fact that women entered other employment and European immigration almost stopped.

In general, the report shows a favorable tendency to pay better wages, as well as an increased demand for many classes of workers, and consequent reduction of unemployment.

Unemployment in Japan.¹

ACCORDING to the official labor census of Japan, there were in that country during the month of May, 1920, 7,360 factories which reduced their labor forces and 4,500 factories which sought new employees. The latter factories took on 62,022 workers and the former dismissed 105,930, making a net reduction of 43,908 in the number of workers. The following table shows these changes by industries:

NUMBER OF WORKERS EMPLOYED AND NUMBER DISMISSED IN SELECTED INDUSTRIES IN JAPAN IN MAY, 1920.

Industry.	Number of new employees taken on.	Number of employees dismissed.
Textile.....	28,307	58,501
Engineering.....	15,175	20,109
Chemical.....	8,030	16,943
Comestible.....	4,621	2,661
Sundry.....	4,965	6,569
Special.....	924	1,147
Total.....	62,022	105,930

Last July a Government official stated that the Japanese Government had under consideration plans for the relief of unemployment. "The repairing of Government highways, the readjustment of rice fields, the clearing of lands, and other public works will give employment to many men." The Home Department has suggested 10 measures of relief. The most important of these are "the undertaking of official enterprises, encouraging of return to agriculture, and emigration to foreign countries."

¹ Source: The Trans-Pacific, a Magazine of International Service, October, 1920, p. 105. Tokyo and New York.

WOMEN IN INDUSTRY.¹

The Telephone Industry in New York State.

IN December, 1919, the governor of New York, desirous of ascertaining the causes of the increasingly inefficient telephone service, directed the New York State Industrial Commission to request its Bureau of Women in Industry to investigate the employment conditions of women in the telephone exchanges throughout the State. The results of this study, which was begun in January, 1920, are embodied in a special bulletin.²

The week ending December 13, 1919, was selected for the study of the pay roll and hours of the operating force, though the study of labor turnover covers the year 1919. In the other parts of the report also records for the entire year were used wherever possible. The investigation includes approximately 12,326 operators, or two-thirds of the girls employed in the exchanges of the State.

The chief problems of the telephone industry seem to lie in the hours of work necessitated by the character of the industry, the wage policy of the company, and the labor turnover.

Hours of Labor. *

IT is in the nature of the telephone industry that service must be given every hour of the day and every day of the week. To insure this continuous service the operating force is usually divided into four shifts—the day, evening, and night shifts, and what is called the split trick.³ The day and night operators have a basic 8-hour day, and the evening and split-trick operators a basic 7-hour day. About 25 per cent of the operators work only 44 hours per week, being given the Saturday half holiday. Those on duty Saturday afternoon are practically paid double for the hours worked in excess of 44.

Overtime is a fairly common occurrence. It is estimated that nearly 30 per cent of 12,156 girls covered worked overtime during the week ending December 13, 1919. "In general, a little over one-fourth of the operating force in New York State worked some overtime." The amount of this overtime varied greatly in different localities. Of the operators of the entire State, 35.76 per cent worked from 3 to 6 hours beyond their regular assignment, and 35.02 per cent worked from 6 to 9 hours beyond their regular assignment; 2,381 evening operators worked overtime, as against 1,035 day operators and 211 night operators. The report declares that "the fact that one-fourth of the operators in New York State worked beyond their regular assignment of hours is indicative of a weakness in the labor policy of the company."

¹ See also article on Wages of women in the candy industry at Verviers, Belgium, pp. 84 to 85.

² The telephone industry. State of New York, Department of Labor, Special Bulletin (No. 100), July, 1920. 95 pp. Prepared by the Bureau of Women in Industry. Issued under the direction of the New York State Industrial Commission. Albany, N. Y.

³ Day operator begins work not earlier than 7 a. m. and stops not later than 7 p. m.

Evening operator begins work not earlier than 11.30 a. m. and ends not later than 11 p. m.

Night operator begins work not earlier than 7 p. m. and ends not later than 7 a. m.

Split-trick operator's work is separated into two divisions by a period of more than 2 hours and not more than 5 hours.

The company is endeavoring to reduce 7-day labor to a minimum. About 2.3 per cent of the operators were reported as working 7 days a week for the week ending December 13, 1919. The operators take turns on Sunday work, and in some exchanges where the duties are not heavy on that day an operator may have an assignment only every fifteenth Sunday. On the other hand, where the exchange work is heavy on that day, an operator may have to take a Sunday shift twice a month. Despite the fact that "time and a half is paid for the first Sunday and double time for Sundays in excess of one in any calendar month," many employees leave the company for no other reason than that such service means Saturday afternoon and Sunday work.

The investigation showed that the 7-day labor had an effect in increasing absenteeism among the operators. During the week ending December 13, 1919, the record showed that of the operating force throughout the State 8.62 per cent were absent on Monday, 6.99 per cent on Tuesday, and 6.98 per cent on Wednesday. This is a higher percentage than is found in other industries, where 5 per cent absenteeism is considered usual. The time lost through this cause for the entire week was 6.61 per cent of the total productive hours.

Wages.

THE wage policy of the company was found to be unsatisfactory. Under the present scheme, with the exception of those who become chief operators or supervisors (and such positions are comparatively few), the operator reaches her maximum earning capacity in 6 years, which in many cases may be when she is only 22 or 25 years of age. The report maintains that this limitation is "discouraging to any worker and implies poor knowledge of psychology on the part of the telephone company."

The following table gives the basic weekly wage rates for 1919 and 1920 in Greater New York.⁴ The actual earnings are of course higher, as operators receive time and a half for overtime and Sunday work and extra for Saturday afternoon.

AUTHORIZED WEEKLY WAGE SCHEDULE FOR OPERATORS IN GREATER NEW YORK, EFFECTIVE FEB. 8, 1920, AS COMPARED WITH WAGE SCHEDULE IN EFFECT IN 1919.

Period of service.	Manhattan.		Bronx, Brooklyn.		Queens, Mount Vernon, Staten Island.	
	1920	1919	1920	1919	1920	1919
School.....	\$15.00	\$12.00	\$14.00	\$11.00	\$13.00	\$10.00
End of 1 month.....	15.50	12.50	14.50	11.50	13.50	10.50
End of 3 months.....	16.00	13.00	15.00	12.00	14.00	11.00
End of 6 months.....	16.50	13.50	15.50	12.50	14.50	11.50
End of 9 months.....	17.00	14.00	16.00	13.00	15.00	12.00
End of 12 months.....	18.00	15.00	17.00	14.00	16.00	13.00
End of 18 months.....	18.50	15.50	17.50	14.50	16.50	13.50
End of 24 months.....	19.00	16.00	18.00	15.00	17.00	14.00
End of 30 months.....	19.00	.....	19.00	16.00	18.00	15.00
End of 36 months.....	20.00	17.00	20.00	17.00	19.00	16.00
End of 48 months.....	21.00	18.00	21.00	18.00	20.00	17.00
End of 60 months.....	22.00	19.00	22.00	19.00	21.00	18.00
End of 72 months.....	23.00	20.00	23.00	20.00	22.00	19.00
Senior operator—maximum.....	24.00	21.00	24.00	21.00	23.00	20.00
Supervisor—maximum.....	27.00	24.00	27.00	24.00	26.00	23.00

* Rates for day operators. Evening operators receive \$1 more per week; night operators \$3 more per week.

The wage scale effective March 7, 1920, for day operators in large places, such as Albany, Syracuse, and Buffalo, ranged from \$12 while in the school to \$19 at the end of 60 months' operating; in medium-sized places, such as Kingston and Auburn, from \$11 while in the school to \$18 at the end of 60 months; smaller places, such as Catskill and Geneva, from \$10 while in the school to \$17 at the end of 60 months.

Based on a grand total of 10,731 operators—which figure excluded 188 operators whose earnings were unknown and 1,407 operators whose earnings could not be considered typical, as absence made their earnings below the basic wage—the earnings fell like this:

336 received under \$12.

1,983 received between \$12 and \$15.

2,997 received between \$15 and \$18.

2,485 received between \$18 and \$21.

1,976 received between \$21 and \$25.

After the \$25 mark is reached there is a gradual decline, only 110 persons on the operating force earning as high as \$30 per week.

Labor Turnover and Length of Service.

THE investigation showed a serious shortage of trained operators for the central offices. The company has spared no effort to get operators. Large sums have been spent in advertising and other forms of recruiting. The great number of applicants in 1919 indicates the company's success in securing candidates for positions. But 16 years is the predominating age among the new employees. Each operator is given a course in operating, which, however, covering as it does only two weeks' instruction, can necessarily impart only the basic knowledge necessary for the simplest local operating. The course formerly lasted four weeks, but because of the lack of operators and the urgent need for their services it was shortened to two. The effect on the service resulting from putting on half-trained operators is obvious.

Efficiency in the telephone service depends largely upon the length of service of operators, two years' experience being regarded as necessary to acquire the ability to carry the theoretical full load of 230 units per hour.⁵ For every three girls, however, who enter the telephone service one leaves during the training period, the second leaves within the first year, and the third remains more than a year. The cost of training is estimated at from \$68 to \$100 an operator. The shorter the operator's service, therefore, the greater the company's expense. Of the total operating force in New York State 50.1 per cent had been in the company's service two years or less.

The most vital problem that the New York Telephone Co. has is the short service of its operators and the high labor turnover resulting. It is, of course, recognized that the year 1919 was an abnormal year, with industry all over the country in a more or less unsettled state, and the telephone company has so far been unsuccessful in the efforts which it has made to materially reduce its labor turnover and to stop the ever-increasing flow of girls out from its employ.

During 1919, 5,858 operators were taken on and the total loss in the operating force was 3,224, of which 2,675 (83 per cent) were

⁵ 230 units do not mean 230 calls. For example, a connection between a subscriber of the Madison Square exchange and Beekman would be 1.55 units, but a call from a pay station where money would have to be returned if the call was not made would be 1.70 units.

resignations, 186 (5.8 per cent) were dismissals, and 363 (11.3 per cent) were transfers, pensions, and deaths. The following table gives the alleged causes of resignation:

CAUSES OF RESIGNATION, AS GIVEN BY OPERATORS.

Cause of resignation.	Number.	Per cent.
Marriage.....	398	14.9
Home duties.....	379	14.2
Return to school.....	111	4.1
Leaving city.....	107	4.0
Disability.....	58	2.2
To private switchboard positions.....	334	12.5
Other employment.....	433	16.2
Hours of work.....	433	16.2
Wages.....	12	.4
Other working conditions.....	308	11.5
Discouraged or indifferent.....	7	.3
Miscellaneous.....	91	3.4
Reason not obtained.....	4	.1
Total.....	2,675	100.0

It is thought that in many cases the girls did not give their real reasons for leaving. According to the report, the company's system for receiving and recording the causes of resignation is not one which will bring the truth from the girls. In leaving they first talk to the chief operator, and they are not likely to give any reason for leaving that reflects either on the chief operator or the company.

Many of the operators complain of the strict discipline and close supervision to which they are subjected. There is a supervisor for every 8 or 10 girls who patrols up and down behind them, oversees their work, and helps them when occasion requires. In addition, observers, invisible to the operators, can "plug in" on their boards at any time and follow up their work in detail. This double supervision adds greatly to the mental and nervous tension of those who are under this strict surveillance, especially when supervisors are unsympathetic. When, in addition to this close supervision, one considers the impatience and irritability of the public in general it will easily be conceded that telephone operating is a nerve-racking job.⁶ The Bureau of Women in Industry was of the opinion that "the outstanding weakness" of the employment methods "has been the lack of a well-defined and well-applied policy to retain the girls and the establishment of a goal in length of service that is worthy of attainment."

General Working Conditions.

ON the whole, the Bureau of Women in Industry finds that the lighting, heating, and ventilation in the telephone exchanges are better than in the average factory, though the ventilation in the operating rooms is still open to some criticism as not being sufficient. The company, it is stated, has gone much farther than the majority of large employers of women in paying particular attention to the physical conditions under which employees work. Seating arrangements, wash rooms, toilets, lockers, rest rooms, and lunch services

⁶ Dr. Richardson, of the New England Telephone Co., found in examining the benefit fund records of the New York Telephone Co. for 1917 that there had been 631 cases of nervous disability, including neuralgia and neurasthenia. This was a rate of 55.8 per 1,000 employees per annum eligible for sickness disability.

are commended. In the Manhattan and Bronx districts 10,761 employees of the company are provided with lunch-room service; 8,876 of these are on the operating force. Food is furnished at extremely low rates, the average expenditure per employee being 13 cents a meal. "During 1919 the expenses for the lunch-room service amounted to \$591,720, and the company had a deficit of \$237,144.42." Outside Manhattan and the Bronx there has been little development of the lunch-room service.

The examinations of the medical department are reported as superficial, and it is regretted that the records of this department are so unstandardized that very little material of significance can be secured from them.

Employees' Benefit Fund.

THE company has since 1913 maintained a scheme under which pensions, sickness and accident disability benefits, and death benefits are paid. The plan is financed by the company, the employees making no contribution whatever.

Pensions are provided for employees who have been in the service 20 years or more. * * * The employees are divided into four groups which are determined by the age of the employee and the length of his service.

The amount of the annual pension is 1 per cent of the average annual pay for 10 years multiplied by the number of years in the employee's term of employment. The minimum pension is \$20 per month, but this minimum does not apply to special disability pensions which may be granted to employees of less than 20 years of service.

Death benefits are payable only to the wife or husband or dependent relative of the deceased employee. They are limited to one year's pay, not exceeding \$2,000, if the employee has been in the service 10 years or more, or to 6 months' pay, not exceeding \$2,000, if the employee has been in the service from 5 to 10 years. In the case of death by accident the benefit amounts to three years' pay, not exceeding \$5,000, and the necessary expenses of burial up to \$150.

In the case of accidents the benefits start from the first day. With total disability full pay is given for 13 weeks and half pay for the remainder of the disability, with a maximum cash benefit of \$20 per week after 6 years. In the case of partial disability 100 per cent loss in earnings is paid for the first 13 weeks and 50 per cent of loss capacity for the remainder of the disability up to 6 years.

Sickness disability benefits apply only to the employees who have been in the service of the company at least 2 years. The benefits begin on the eighth day of absence on account of sickness and vary in amount according to the term of service. Every employee of 2 to 5 years' service receives full pay for 4 weeks and half pay for 9 weeks. For those whose service is between 5 and 10 years full pay is given for 13 weeks and half pay for a similar period of time. For those whose term of employment has been more than 10 years full pay is given for 13 weeks and half pay for 39 weeks. * * *

During 1919 the benefit fund paid out \$667,991.26, of which \$475,164.02 went to sickness disability benefits. The death benefits amounted to \$97,623.40; the pensions, \$25,175.87; the accident disability, \$56,396.78; and special disability expenses \$13,631.19.

As a result of the survey the following recommendations are made by the Bureau of Women in Industry:

- (1) Scientific selection of suitable operators by the employment department in order to decrease the labor turnover within the training school itself.
- (2) A reorganization of labor management, so that the same department, preferably the employment department, is responsible for employing, dismissing, and accepting resignations of operators, thus securing coordinated methods of handling labor supply.
- (3) The limitation of the number of working days to six.
- (4) Compulsory rest periods of 15 to 20 minutes at reasonable intervals for every operator, preferably splitting the trick in two equal parts.

(5) The elimination of all overtime and the gradual establishment of a seven-hour shift for the day and the night operators similar to the seven-hour shift for evening and split-trick operators.

(6) A higher maximum wage rate and a faster rate of promotion for an employee who has been in the service two years. Increase in wage, after this period which marks the beginning of 100 per cent efficiency, should be such that it will be an incentive to remain with the company.

(7) The extension of the facilities of the medical department to give operators periodical physical examinations with particular reference to nervous strain and its effect on health and efficiency. In order to make this effective complete medical records for each employee should be kept.

(8) A democratic system of organization and representation among the employees through which they may express their desires and by which they may acquire a sense of responsibility toward their work.

Employment of Women in Industrial Occupations in Oregon.

THE Bureau of Labor Statistics and Inspector of Factories and Workshops of Oregon has furnished this bureau with advance figures relative to the industrial employment of women in that State, which are to be included in its next (ninth) biennial report. The tables include detailed figures as to the extent of female labor in Oregon, the average wages received by them, and the hours worked, and give details as to conjugal condition and dependents of woman employees.

In the following table are shown the number of male and female workers employed in each of the principal industry groups of the State, and the average daily wages received by skilled and unskilled workers of each sex:

NUMBER OF MALE AND FEMALE EMPLOYEES AND AVERAGE DAILY WAGES RECEIVED, BY INDUSTRY GROUPS.

Industry group.	Number of employees reported.			Average daily wages of—			
	Males.	Females.		Males.		Females.	
		Num-ber.	Per cent of total labor force.	Skilled.	Un-skilled.	Skilled.	Un-skilled.
Wood and wood products.....	26,559	307	1.1	\$5.69	\$4.58	.....	\$3.25
Metal products.....	25,790	488	1.9	5.86	4.13	.....	3.26
Food products.....	5,856	3,846	39.6	5.54	4.18	.....	2.91
Paper and paper products.....	1,838	124	6.3	4.91	3.70	.....	2.00
Textiles, clothing, and furnishings....	1,152	1,726	60.0	5.82	4.62	\$3.59	2.48
Clay and stone products.....	568	7	1.2	6.02	4.47	.....	3.25
Miscellaneous manufacturing.....	1,184	125	9.5	5.77	4.44	.....	2.33
Mining.....	380	42	10.0	5.16	4.40	4.25	2.50
Leather and rubber.....	222	48	17.8	5.35	4.44	3.25	2.45
Printing and publishing.....	926	227	19.7	6.35	4.21	3.48	2.73
Total.....	64,475	6,940	9.7	5.80	4.37	3.57	2.84

The total number of firms in Oregon included in each of the industry groups mentioned above was as follows: Wood and wood products, 495; metal products, 234; food products, 339; paper and paper products, 5; textiles, clothing, and furnishings, 59; clay and stone products, 42; miscellaneous manufacturing, 64; mining, 8; leather and rubber, 13; and printing and publishing, 54. These figures can not, however, be used in connection with the data given in the above table, since the number of firms reporting on each point varied.

It is evident from the table that the only industry groups in which women form any considerable part of the labor force were those of food products and textiles, clothing, and furnishings, in which, respectively, two-fifths and three-fifths of the employees were women. In miscellaneous manufacturing, mining, leather and rubber, and printing and publishing women form, respectively, 9.5, 10, 17.8, and 19.7 per cent of the total number of persons employed. The number employed in the other industry groups is negligible. The average daily wages of the woman employees range from a little over half to a little over four-fifths of those paid male workers of the same classification.

For certain other industries, most important from the point of view of female employment, more detailed information as to the women was secured.

In the following table are shown, for these industries, the number of employees of each sex, the average weekly wages paid, and the number of time and piece workers:

NUMBER OF EMPLOYEES OF EACH SEX, AVERAGE WEEKLY WAGES PAID, AND NUMBER OF TIME AND PIECE WORKERS, BY INDUSTRY.

Industry.	Number of employees.			Average weekly wages.		Number of time workers.	Number of piece-workers.
	Males.	Females.	Total.	Males.	Females.		
Manufacturing.....	3,570	3,607	7,177	\$30.46	\$18.58	6,243	934
Mercantile.....	2,504	2,968	5,472	29.81	17.30	5,471	1
Public housekeeping.....	2,222	2,354	4,576	27.35	14.84	4,572	4
Telephone and telegraph.....	868	2,125	2,993	31.66	16.60	2,993	.....
Laundering, cleaning, and dyeing.....	665	1,605	2,270	29.46	15.19	2,227	43
Offices.....	.....	633	633	.....	23.96	633	.....
Personal service.....	138	202	340	40.89	18.93	339	1
Total.....	9,967	13,494	23,461	29.79	17.19	22,478	983

In all of these industries women form 50 per cent or more of the employees. In no case does their average weekly wage equal that received by the men. Of the woman employees, those in public housekeeping (bakeries, confectionery stores, hotels, restaurants, etc.) receive the lowest average weekly wage, \$14.84, while office employment is the most remunerative, paying an average of \$23.96 per week.

Time work predominates in all of the industry groups.

In the table below are given details as to the number of days per week and hours per day worked by women:

DAYS PER WEEK AND HOURS PER DAY WORKED BY WOMEN IN EACH SPECIFIED INDUSTRY.

Industry.	Total number of plants employing women.	Total number of women employed.	Number of plants in which women are employed each classified number of days per week.			Number of women working each classified number of days per week.		
			Under 6	6	7	Under 6	6	7
Manufacturing	160	3,607	35	124	1	1,691	1,910	6
Mercantile	242	2,968	7	231	4	79	2,878	11
Public housekeeping	396	2,354	1	195	200	1	1,501	852
Telephone and telegraph	79	2,125	-----	67	12	-----	2,058	67
Laundering, cleaning, and dyeing	66	1,605	13	53	-----	109	1,496	-----
Offices	50	633	27	23	-----	317	316	-----
Personal service	23	202	2	17	4	13	161	28
Total	1,016	13,494	85	710	221	2,210	10,320	964

Industry	Number of plants in which women are employed each classified number of hours per day.				Number of women working each classified number of hours per day.			
	Under 8	8	Over 8 and under 9	9	Under 8	8	Over 8 and under 9	9
Manufacturing	15	91	47	7	81	1,577	1,504	445
Mercantile	52	171	13	6	1,572	1,218	145	33
Public housekeeping	185	193	6	12	907	1,393	20	34
Telephone and telegraph	11	67	1	-----	81	2,036	8	-----
Laundering, cleaning, and dyeing	1	55	3	7	4	1,468	26	107
Offices	10	34	6	-----	39	421	173	-----
Personal service	10	12	-----	1	95	102	-----	5
Total	284	623	76	33	2,779	8,215	1,876	624

It is evident from the above table that the 6-day working week prevails in the industries which are large employers of women. The only important exceptions are office employment, in which 54 per cent of the firms employ women for less than 6 days per week, and public housekeeping, in which a little over half of the firms employ woman labor for 7 days in the week. These latter establishments, however, employ less than two-fifths of the women engaged in that industry.

The 8-hour day is, as the table shows, the one most commonly worked. Taking all the industries together three-fifths of the establishments, employing about three-fifths of all the women, were run on an 8-hour basis.

The following table gives the distribution of the women according to their financial responsibilities, and for those women having dependents, the number of such dependents, both children and adults:

NUMBER OF WOMEN WITH AND WITHOUT DEPENDENTS, AND NUMBER OF CHILD AND ADULT DEPENDENTS OF WOMEN HAVING SUCH, BY INDUSTRY.

Industry.	Total number of women.	Number of women without dependents.	Women with dependents.				
			Number of women.	Per cent of total.	Number of dependents.		
					Children.	Adults.	Total.
Manufacturing.....	3,607	2,618	989	27.4	694	299	993
Mercantile.....	2,968	2,445	523	17.6	326	344	670
Public housekeeping.....	2,354	1,785	569	24.2	411	117	528
Telephone and telegraph.....	2,125	2,062	63	3.0	33	46	79
Laundrying, cleaning, and dyeing.....	1,605	1,322	283	17.6	303	123	426
Offices.....	633	560	73	11.5	24	53	77
Personal service.....	202	183	19	9.4	7	5	12
Total.....	13,494	10,975	2,519	18.7	1,798	987	2,785

Of the 13,494 women included in the study, 2,519, or 18.7 per cent, were supporting dependents, averaging a little over one dependent each. Women engaged in manufacturing and public housekeeping were, more generally than those in the other industries, supporting dependents. The number of dependents per woman was, however, greatest among the employees in the laundrying, cleaning, and dyeing industry, where the 283 women having dependents supported 426 dependents, an average of 1.5 persons each.

The table following shows the marital condition of the women who were supporting dependents. The outstanding feature of this table is the fact that more than one-third of the women having dependents were single.

DISTRIBUTION OF WOMAN WORKERS WITH DEPENDENTS, ACCORDING TO MARITAL CONDITION, IN SPECIFIED INDUSTRIES.

Industry.	Number of women, with dependents, of each specified marital condition.						Total.
	Single.	Married.	Widowed.	Separated.	Divorced.	Deserted.	
Manufacturing.....	413	282	176	38	76	4	989
Mercantile.....	198	97	109	32	71	16	523
Public housekeeping.....	170	146	96	54	93	10	569
Telephone and telegraph.....	36	7	13	1	5	1	63
Laundrying, cleaning, and dyeing.....	47	67	91	22	47	9	283
Offices.....	54	7	10	.....	2	.....	73
Personal service.....	10	1	1	3	4	.....	19
Total.....	928	607	496	150	298	40	2,519

CHILD LABOR.

Industrial Instability of Child Workers in Connecticut.

THE conclusions reached through a study of employment certificate records in Connecticut made by the Children's Bureau of the United States Department of Labor are presented in a recent bulletin entitled "Industrial instability of child workers" published by that bureau.¹

It is stated that Connecticut offered special facilities for such an investigation because the employment histories of children between the ages of 14 and 16 years are centralized in the office of the State board of education, which entirely controls the issuing of work permits. These certificates are granted to those children between 14 and 16 years of age who meet the educational and physical requirements and have the promise of a position. These records show, also, the date of beginning and of terminating each period of employment, and the intervals between such periods.

The study was confined to children who had definitely left school and entered the industrial world, and throws light upon important questions concerning child labor, such as how soon after passing the fourteenth birthday children actually begin to seek employment in a State where 14 is the legal minimum, how long children stay in their first position, the number of positions held, and the interval between positions.

The group of children studied had passed their fourteenth birthday sometime between September 1, 1911, and September 1, 1912, and had completed their sixteenth year and the certificate record by September 1, 1914. Consequently the conclusions reached were not affected by the abnormal labor conditions brought on by the war.

Employment certificates were granted to 7,147 children or nearly one-third of those reaching the legal working age between September 1, 1911, and September 1, 1912. The proportion employed increased from 7.3 per cent in the month following the fourteenth birthday to 31.8 per cent on the sixteenth birthday. Thirty-five per cent of the boys, as compared with 28.6 per cent of the girls, were employed before passing the sixteenth birthday. For the two years of age under consideration, about 24 per cent were gainfully employed in industrial occupations.

About three-fourths, or 74.7 per cent, of the 7,147 children were first employed in manufacturing and mechanical industries, 28.9 per cent in metal industries, 21 per cent in textile industries, and 8.6 per cent in clothing manufacture. The largest number of boys went to the metal industries and girls to textile and clothing factories.

Comparison of Instability of Boy and Girl Workers.

AS TO the length of the first employment, the investigation showed that nearly 30 per cent of the 2,500 children who began working within 3 months after passing the fourteenth birthday remained in

¹ U. S. Department of Labor. Children's Bureau. Industrial instability of child workers. A study of employment certificate records in Connecticut. By Robert Morse Woodbury. Washington, 1920. 86 pp. Industrial series No. 5. Bureau publication No. 74.

the first position for more than 21 months. A slightly larger percentage (34.4 per cent) left their first position before three months had elapsed, 15.5 per cent leaving in less than a month. The girls showed less tendency to change employment than the boys, 33.1 per cent of the girls remaining in their first position for over 21 months, as compared with 26.9 per cent of the boys. Of the boys 18 per cent left the first job within a month and over half changed work before six months. The following table shows the number and duration of positions held by each specified number of boys and girls with work histories covering 21 to 24 months.

NUMBER AND DURATION OF POSITIONS HELD BY EACH SPECIFIED NUMBER AND PER CENT OF BOYS AND GIRLS, WITH WORK HISTORIES COVERING 21 TO 24 MONTHS.

Average duration of position.	Children		Boys.		Girls.	
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
1 position only: 1 year or over.....	836	33.8	432	31.2	404	37.0
2 or 3 positions: 6 months but less than 1 year.....	1,068	43.1	580	41.9	488	44.7
4 to 7 positions: 3 months but less than 6.....	517	20.9	328	23.7	189	17.3
8 or more positions: Less than 3 months.....	55	2.2	45	3.2	10	.9
All classes.....	2,476	100.0	1,385	100.0	1,091	100.0

The 7,147 children held a total of 14,826 positions, of which 8,867 were held by 4,000 boys and 5,959 by 3,147 girls, an average of 2.2 each for the boys, as compared with 1.9 each for the girls. It should be noted in this connection, however, that the boys have somewhat longer work histories than the girls. The number of positions held by any one child ranged from 1 to 15. The group known as "unsteady workers," i. e., those who held eight or more positions within less than two years, comprise only about 2 per cent of the total. It could not be determined from the records how much of this shifting was desirable and how much undesirable.

In about 37 per cent of the total of 8,274 cases of intervals between positions, defined as the period between the date of the termination notice of one position and the date of the beginning notice of the next, the children found other positions in less than a week. Over half of the children had no periods of unemployment. The proportion of unemployment became less as the children became adjusted to the discipline of industry.

Compulsory continuation schools for unemployed children between the ages of 14 and 16, it is pointed out, would greatly facilitate the solving of the problem of unemployed children and train them along the lines of their chosen work while they are unemployed.

Child Conservation in Massachusetts Industries.

THE investigations of industrial accidents by the Division of Industrial Safety of the Department of Labor and Industries of Massachusetts have shown the need of cooperation with the other governmental agencies in order to reduce the number of injuries

to child workers. In this connection it is proposed to teach safe practices to the approximately 30,000 children between the ages of 14 and 16 years who are attending the 44 continuation schools of the Commonwealth. A bulletin on "Conserving children in the industries of Massachusetts" ¹ has recently been issued by the Department of Labor and Industries and is to be given wide circulation among the school authorities. It is realized that the accidents to children in industry in Massachusetts, which arise out of and in the course of their employment "constitute a serious social problem."

The whole system of Massachusetts legislation for the protection of youth in industry is built on the principle that "no child under 16 years of age should be employed or permitted to work in proximity to an industrial hazard in which he may sustain occupational injury. In many lines of employment deemed to be of an extra hazardous nature a minor under 18 years of age is not permitted to work." The effective administration of these laws is one of the most important functions of the inspection staff of the Division of Industrial Safety. Although flagrant violations are prosecuted, such action is not an adequate remedy. Nor is the imposition of the maximum penalty sufficient to prevent injuries to children.

For the year ending June 30, 1919, 1,691 minors between 14 and 16 years of age "sustained tabulatable injuries," ² 10 of which ended fatally and 62 resulted in permanent partial disability."

An examination of the injuries resulting in permanent partial disability, as shown in the following table, gives some idea of the suffering endured by children in this respect, and demonstrates very clearly how children are handicapped for the future:

Amputation and loss of use of—

One eye.....	2
One hand or arm.....	4
Two or more fingers or thumb and fingers.....	6
Two or more toes on one foot.....	2
One finger or one thumb.....	46
One toe.....	1
One hand and one finger, or one arm and one finger or one arm and one thumb, or one hand and one thumb.....	1
	62

* * * * *

Over \$5,000,000 were paid out under the workmen's compensation act during the year quoted above for compensation and medical treatment to injured workmen. The harmful effect upon the community can not be made clear on the statistical basis of dollars and cents. It is written in terms of suffering and pain to the working men and women of this State.

It is authoritatively stated that about 75 per cent of industrial accidents are preventable. The proposal to educate the children in the continuation schools regarding the hazards of industry is one of the most "potential" plans for the prevention of accidents that has ever been offered. "Training of this nature will establish the foundation of a new attitude toward safety in industry on the part of the future men and women who will be employed in the hazardous industries of the Commonwealth."

¹ Industrial Bulletin No. 15. Boston, Mass., 1920. 20 pp.

² A tabulatable injury "is one in which the employee sustains an accident arising out of his employment, and causing incapacity for more time than the remainder of the shift or the day on which he was injured."

Employment Certificates Issued to Children in Minnesota in 1918-19 and 1919-20.

THE Minnesota Commissioner of Labor and Industries in a recent communication to the bureau forwarded a statement showing the number of employment certificates issued to children in that State in the years ending June 30, 1919, and 1920, by occupations in which the certificates permitted them to work, and a statement showing the number of certificates issued in the six years 1915 to 1920. In addition to information contained in the tables the commissioner states that during the same biennial period the department made 1,035 special child labor investigations, most of which were made on complaint of illegal employment of children. Violations of law were found in 568 establishments, the number of children involved being 810, and as a result 113 firms were prosecuted on 136 counts. In Minneapolis the hazards of the employment in which work is desired are investigated before certificates are issued to children. The following table shows the number of employment certificates issued to boys and girls, by occupations in which they are thus permitted to engage:

OCCUPATIONS OF CHILDREN TO WHOM EMPLOYMENT CERTIFICATES WERE ISSUED
IN YEARS ENDING JUNE 30, 1919 AND 1920.

Occupation.	Year ending June 30—					
	1919			1920		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Apprentices.....	81	49	130	73	52	125
Bell hops.....	2		2	4		4
Bookkeepers and assistants.....	1	3	4		2	2
Bundle wrappers.....	21	19	40	6	23	29
Cash boys and cash girls.....		14	14	3	8	11
Cashiers.....		1	1		1	1
Checkers.....	2	6	8	2	22	24
Checkroom attendants.....	1		1	1		1
Clerks, office.....	51	41	92	28	50	78
Clerks, store.....	66	55	121	63	106	169
Collectors and solicitors.....				1		1
Delivery boys.....	90		90	60		60
Errand runners.....	191	30	221	222	21	243
Factory workers and helpers.....	90	131	221	143	177	320
Farm workers.....	12		12	6		6
Floor boys.....	2		2	2		2
Hotel clerks.....				1		1
Houseworkers and nurse girls.....		11	11	1	17	18
Inspectors.....	3	8	11	2	5	7
Janitors, porters, and chore boys.....	3		3	4		4
Kitchen helpers.....		1	1	2	6	8
Laborers and helpers.....	9		9	30		30
Messengers—banks, stores, and offices.....	57	58	115	56	44	100
Messengers—telegraph and telephone.....	57	2	59	94	3	97
Meter readers.....	2		2			
Office boys and girls.....	75	21	96	115	17	132
Pages and ushers.....	11	2	13	11	3	14
Shipping clerks and assistants.....	19	1	20	4		4
Shoe shiners.....	1		1	3		3
Special-delivery messengers—post office.....	7		7	3		3
Stenographers and typists.....		6	6		14	14
Stockroom workers.....	30	26	56	35	33	68
Teamsters.....	2		2	7		7
Telephone operators.....		10	10		14	14
Waitresses.....		3	3		13	13
Total.....	886	498	1,384	982	631	1,613

The number of employment certificates issued during the six-year period 1915 to 1920 was as follows:

EMPLOYMENT CERTIFICATES ISSUED TO CHILDREN AND PER CENT OF INCREASE EACH YEAR, 1915 TO 1920.

Year ending June 30—	Number of certificates issued.	Increase over preceding year.		Per cent of increase over 1915.
		Number.	Per cent.	
1915.....	550	.....	.....	.....
1916.....	638	88	16.0	16.0
1917.....	845	207	32.4	53.6
1918.....	1,047	202	23.7	90.0
1919.....	1,384	337	32.1	151.6
1920.....	1,613	229	16.5	193.2

Enforcing the Child-Labor Law in North Carolina.¹

THE North Carolina child-labor law of 1919, which was combined with the school-attendance law, prohibits the employment of children under 14 years of age. The State Child Welfare Commission may make certain exceptions. The only exceptions which have been made are in the case of boys between 12 and 14 years of age who may work "when the public school is not in actual session, provided the employment is not injurious to their health and morals and a certificate to that effect is obtained by the county superintendent of public welfare."

The Commissioner of the State Department of Labor and Printing has reported that—

In carrying out the law the Child Welfare Commission is seeing not only that there are no violations but is stimulating in each locality a sentiment for community playgrounds and other forms of recreation and training for children who are not in school. In North Carolina the child-labor law is regarded as a part of the general program of child welfare of the State, and the commission realizes that the largest problem is not so much the mere prevention of child labor, which within the age limit prescribed is practically extinct, but the provision for positive measures of education, recreation, and more wholesome home surroundings.

Employment of Children in the Industries of Winnipeg, Manitoba.

THE prevalence of child labor—that is, of children 18 years of age and under—in the industries and commercial establishments of Winnipeg, Manitoba, is indicated by the results of a recent survey of 1,400 concerns made by a juvenile employment expert in that city and reported by the American consul at Winnipeg under date of October 25, 1920. The survey showed that more than 5,000 child workers were employed, of whom 2,650 were boys and 2,362 were girls. Many of them, it appears, are employed unwillingly in occupations that hold forth no prospect of advancement, and it is stated that employers find it difficult to obtain the right kind of

¹ Source: Proceedings of the Seventh Annual Convention of the Association of Governmental Labor Officials of the United States and Canada held in Seattle, Washington, July 12-15, 1920, to be published as Bulletin No. 266 of the U. S. Bureau of Labor Statistics.

juvenile workers to occupy positions in which promotion is a matter of individual opportunity. The establishment of juvenile employment agencies in connection with the Employment Service of Canada is recommended, and the Government has signified a willingness to establish such a division as soon as possible. This, it is believed, will result in furnishing employers with the right kind of children and offer the latter an opportunity to get into employment for which they are fitted and which would give them a chance to advance. The following table shows the distribution of employment of boys and girls at the present time in each industry:

NUMBER AND PER CENT OF CHILDREN 18 YEARS OF AGE AND UNDER EMPLOYED IN EACH SPECIFIED INDUSTRY.

Industry.	Boys.	Girls.	Total.	Per cent in each industry.
Railways.....	367	23	390	7.78
Department stores.....	374	881	1,255	25.04
Textile.....	58	385	443	8.84
Printing, publishing, bookbinding.....	194	247	441	8.80
Laundry.....	.....	177	177	3.53
Meat packing.....	66	63	129	2.57
Paper box, envelopes.....	31	87	118	2.35
Optical goods.....	34	42	76	1.52
Wholesale drug and patent medicine.....	53	24	77	1.54
Hardware, wholesale and retail.....	98	31	129	2.57
Manufacturing and metal goods.....	87	7	94	1.88
Sheet metal.....	35	7	42	.84
Dry goods, wholesale and retail.....	30	10	40	.80
Groceries, wholesale.....	45	23	68	1.36
Groceries, retail.....	272	2	274	5.47
Meal markets.....	85	.....	85	1.70
Candy and confectionery.....	18	56	74	1.48
Wooden box and woodwork.....	64	3	67	1.34
Dyeing and cleaning.....	2	17	19	.38
Banking.....	16	12	28	.56
Financial agents.....	18	25	43	.86
Cafés.....	6	27	33	.66
Electricity.....	24	5	29	.58
Engraving.....	7	4	11	.22
Food, drink, and tobacco.....	23	11	34	.68
Grain exchange brokers.....	34	50	84	1.68
Newspapers.....	241	.....	241	4.81
Bowling alleys.....	46	.....	46	.92
Retail drug stores.....	91	1	92	1.84
Hotels.....	25	17	42	.84
Messengers.....	19	.....	19	.38
Golf clubs.....	34	.....	34	.68
Multigraphing and duplicating.....	10	60	70	1.40
Miscellaneous.....	143	65	208	4.15
Total.....	2,650	2,362	5,012	100.00

INDUSTRIAL ACCIDENTS AND HYGIENE.

Creation of Service of Industrial Hygiene at International Labor Office.¹

A SERVICE of Industrial Hygiene has recently been created as part of the International Labor Organization, to study the questions which the Commission on Unhealthy Processes of the first International Labor Conference at Washington in 1919 brought to the special attention of the International Labor Office. These questions include protection against infection by anthrax in industry; prohibition of the use of white lead in painting; prohibition of the use of nitrate of mercury in the process of "carrotting" rabbit fur; and the prevention of poisoning by carbon monoxide gas and by lead. The first two questions, relating to anthrax and white lead, have been placed on the agenda for the 1921 convention to be held at Geneva in April, and the Service of Industrial Hygiene is now engaged in collecting information on the two points.

Aside from the definite tasks assigned to it the Service of Industrial Hygiene will study the general problems of the health of the worker, industrial fatigue, and feeding. Its program of action is thus summarized in the International Labor Office Bulletin: (1) The conduct of a general and permanent inquiry into unhealthy processes with a view to the preparation of draft conventions and recommendations for submission to the General Conference, and (2) generally to deal with everything relating to industrial hygiene by the coordination of the provisions common to the various national legislations and the preparation of international regulations.

Dr. Luigi Carozzi, formerly head of a service at the Milan clinic, lecturer on industrial pathology at the Rome University, and medical inspector of labor at the Ministry of Industry and Commerce, is director of the new service.

Report on Industrial Accidents in New York State, 1919-20.

THE bulletin of the New York State Industrial Commission, in the September issue, gives the following statistics on industrial accidents for the year ending June 30, 1920, as reported to the bureau of compensation:

Accidents reported to the commission.....	345, 672
Claims for compensation filed with the commission, indicating persons disabled beyond two weeks ²	52, 251
Direct settlements of claims between employers and employees.....	12, 832
Fatal accidents resulting in death claims.....	1, 275
Total accidents reported in New York City district.....	232, 303
Compensatable accidents in New York City district.....	29, 957

¹ Data taken from Bulletin (No. 5) of the International Labor Office for Oct. 6, 1920, pp. 8, 9. Geneva.

² Compensation is not paid for the first 2 weeks.

Accidents in Mines and on Railroads in the United Kingdom in 1919.

DETAILED tabulations of mine and quarry accidents in Great Britain and Ireland (in the case of quarries, including also the Isle of Man) during 1919 are presented in part 1 (divisional statistics and reports) of the report of the chief inspector of mines, Great Britain, for 1919, issued under date of August 18, 1920. A summary of these figures is presented in the following table:

ACCIDENTS IN MINES AND QUARRIES IN GREAT BRITAIN IN 1919, SHOWING COMPARISON OF FATALITY RATES IN 1919 WITH THOSE OF 1918.

Place and cause of accident.	Number of accidents in 1919.		Fatality rate.	
	Fatal.	Nonfatal.	1919	1918
Coal mines:				
Explosions of fire-damp or coal dust.....	27	99	0.03	0.20
Falls of ground.....	589	42,518	.82	.86
Shaft.....	45	425	.05	.06
Miscellaneous underground.....	342	63,531	.36	.48
Surface.....	115	10,849	.47	.58
Total.....	1,118	117,422	.94	1.39
Metalliferous mines:				
Falls of ground.....	18	194	1.46	.74
Shaft.....	33	62	2.68	.16
Miscellaneous underground.....	9	576	.73	.49
Surface.....	5	275	.54	.23
Total.....	65	1,107	3.00	.91
Quarries:				
Falls of ground.....	14	257	.38	.82
Blasting.....	4	45	.11	.32
During descent or ascent.....		56		
Miscellaneous.....	16	1,626	.43	.90
Surface.....	12	712	.59	.65
Total.....	46	2,696	.81	1.55
Grand total.....	1,229	121,225		

It should be stated that the fatality rates are figured on the basis of 1,191,313 employees in coal mines, 21,661 in metalliferous mines, and 57,076 in quarries.

Railroad Accidents.¹

A RECENT report of the British Ministry of Transport deals with the accidents that occurred on the railroads of the United Kingdom during the year 1919. It is required by law that all accidents which in the working of railroads or on railroad premises occur to "passengers" and "other persons" shall be reported, but that in the case of "servants" only those accidents which incapacitate them for their usual work for one day or more shall be noted. Those classed as "killed" include those persons so severely injured as to die at a date subsequent to the accident but prior to the date of this report.

¹ Data taken from Report to the Ministry of Transport upon the accidents that have occurred on the railways of the United Kingdom and returns of accidents and casualties for the year 1919. London, 1920. 45 pp. Cmd. 962.

The following table is a general summary of all railroad accidents occurring in 1919 compared with those in 1918:

NUMBER OF PERSONS KILLED OR INJURED ON THE RAILROADS OF THE UNITED KINGDOM IN 1919, COMPARED WITH 1918, SHOWING PER CENT OF INCREASE OR DECREASE.

Group.	1918		1919		Per cent of increase.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Train accidents:						
Passengers.....	8	463	3	513	¹ 62.5	10.8
Servants.....	5	146	7	114	40.0	¹ 21.9
Other persons.....	6	25	8	30	33.3	20.0
Accidents caused by the movement of trains and railroad vehicles, exclusive of train accidents:						
Passengers.....	120	755	83	1,835	¹ 30.8	143.0
Servants.....	293	2,570	318	3,845	8.5	49.6
Other persons.....	367	225	426	217	16.1	¹ 3.6
Accidents on railroad premises not included in the two groups above:						
Passengers.....	5	(²)	12	495	140.0	.....
Servants.....	39	(²)	³ 52	⁴ 16,489	33.3	.....
Other persons.....	27	(²)	23	445	¹ 14.8	.....
Total.....	870	(²)	932	23,983	7.1	.....

¹ Decrease.

² Of accidents in which the movement of trains and railroad vehicles was not concerned only the fatal cases were required to be reported in 1918.

³ Three were servants of contractors and not of railroads.

⁴ Eighty-three were servants of contractors and not of railroads.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE.

Comparison of Compensation Insurance Systems as to Cost, Service, and Security.¹

By CARL HOOKSTADT.

Purpose of the Investigation.

FOR the past three or four years the Bureau of Labor Statistics has received numerous requests from State legislators and others for information regarding the relative merits of different types of insurance under workmen's compensation. Heretofore the bureau has been unable to furnish such information. The bureau began in 1919 an investigation of compensation insurance systems. The field work of this investigation has just been completed. The points upon which information was particularly sought were the relative costs, security, and service of the various types of insurance carriers. The question of costs included both cost of insurance and the cost of administration. The question of security covered security both to employers and to injured workmen. As regards service, three tests were taken into consideration, viz, (1) promptness of compensation payments, (2) adequacy or liberality of payments, including liberality of interpretation of the laws, and (3) accident prevention work.

Scope and Method.

THE investigation covered 21 States and 2 Canadian Provinces, as follows:

Exclusive State funds.—British Columbia, Nevada, North Dakota, Ohio, Ontario, Oregon, Washington, West Virginia, and Wyoming.

Competitive State funds.—California, Colorado, Idaho, Maryland, Michigan, Montana, New York, Pennsylvania, and Utah.

States having no State funds.—Illinois, Indiana, Massachusetts, Minnesota, and Wisconsin.

The industrial commission of each of the above States and Provinces was visited. The records and procedure in each State were examined and studied first hand. Particular attention was given to the following subjects: Accident reporting; claim procedure and method of compensation payments; method of handling permanent partial disabilities; formulation of insurance rates; auditing of pay rolls; computation of reserves; merit rating; and declaration of dividends. A few of the States had made special studies or had tabulated data which were utilized to some extent by the Bureau in its investigation. The Illinois, Michigan, and Pennsylvania commissions had made studies relative to the promptness with which compensation payments had been made by the different insurance carriers. In New York the Connor investigation furnished pertinent informa-

¹ Address delivered before the seventh annual meeting of the International Association of Industrial Accident Boards and Commissions, San Francisco, Calif., Sept. 20-24, 1920.

tion. Most of the information, however, was obtained directly from the books and records of the commissions.

Every State and Province visited gave me access to all its material. The present report is only tentative. It is not complete. The investigation was completed only a month ago, and there has not been time to tabulate and arrange and correlate in full the amount of information received.

Description of Funds.

IT might be advisable to describe the various State funds. There exists a general lack of information as to what State funds are, what they are doing, and how they are doing their business. The State funds are of two general types, the exclusive State fund and the competitive. Nine exclusive State funds were studied. These vary somewhat among themselves. Ontario, British Columbia, and Washington are of the same type. In these both compensation and insurance are compulsory. No private insurance or self-insurance is permitted. Nevada and Oregon are a little different in that compensation is not compulsory but elective. If the employers in these States elect compensation, they must insure with the State fund. Neither private companies nor self-insurers are permitted. Ohio and West Virginia permit self-insurers to do business, but private companies are excluded.

There are nine competitive funds. Of these six are under the supervision and jurisdiction of industrial commissions which administer the funds. In some of the competitive States—for example, in Montana—the fund is an integral part of the commission; in other States the fund is practically independent, as it is in California. In States in the latter class the commission formulates the general policies of the fund and then appoints the manager and grants him relatively complete control of the fund; in the former the commission retains greater administrative control over the fund. Two State funds (Idaho and Michigan) are under the jurisdiction of insurance departments. The Pennsylvania State fund is under a specially created board, which appoints the manager and has charge of the fund. The table facing page 156 details the relative efficiency as to promptness of compensation payments under various insurance systems.

A statement should be made as regards the amount of business written by the several State funds. The stock companies in general wrote about \$91,000,000 in premiums during 1919. This figure was arrived at by Dr. Whitney, of the National Workmen's Compensation Service Bureau. It does not include quite all of the stock companies, but approximately \$91,000,000 was written by them last year. The mutual companies wrote \$27,000,000,² and the State funds wrote \$33,000,000. The premium income of the State funds is probably larger than that, because their premium rates are usually lower than the stock company rates; on the basis of the stock company rates, their premium would be larger. The stock companies, therefore, wrote 60 per cent of the business; the mutuals, 18 per cent; and the State funds—taking them as a whole, competitive and exclusive—22 per cent.

² Data furnished by Mr. E. S. Cogswell, manager National Association of Mutual Casualty Companies.

The amount of business written by the competitive State fund varies in the different States. It ranges from 4 per cent in Michigan to about 49 per cent in Montana. The average of all the competitive State funds is 13.2 per cent; i. e., they write 13.2 per cent of the insurance business in the competitive States. California wrote about 35 or 36 per cent last year, and I understand it has gone up to about 40 per cent. Pennsylvania and New York, the next largest funds, write about 12 per cent. These figures are only approximate but are sufficiently accurate for present purposes of comparison.

Two or three of the State funds have very considerably increased their premium income since their establishment. The California fund has grown very much, and so has the Montana fund. The New York and Pennsylvania funds have increased somewhat, but the others have remained about stationary. The fact that some of these write very little of the compensation business is due to various causes. One reason is that they have not sufficient employees to go out and get business. Among some State funds, it is the avowed policy of those in charge not to solicit business, but simply to take whatever comes to them. They would have the State fund function as a sort of last resort to take the business not wanted by the other companies, and consequently they have no particular interest in increasing the size of the fund. In one State, from all available evidence, it seems that those in control of the fund are more interested in its failure than in its success. Then, too, in most of the States the fund must meet the continual hostility of private insurance carriers. These are some of the reasons which account for the lack of progress of some of the State funds.

General Comparison of State Funds with Private Insurance.

I WISH next to compare in a general way State funds with private insurance carriers. But in order that the comparisons between different States and between different types of insurance may be accurate, it is necessary to take into account several factors. Among the more important of these are the following: Variations in the provisions in the various laws; methods of procedure; methods of wage payments in the different localities; the size or area of the State; and the nature of the industries.

Moreover, it is practically impossible to compare State funds as a whole with stock companies as a whole, with mutual companies as a whole, or with self-insurers as a whole, for the reason that there are such great variations within each type of insurance. Some of the State funds are more efficiently managed and give better service than any other type of insurance carrier. On the other hand, some of the State funds are badly managed and give poorer service than other types of insurance. As examples of the best funds, I would cite California for the competitive fund, and Oregon, Nevada, and British Columbia for the exclusive State funds. At the other end of the line I would cite Idaho and Michigan for the competitive fund and West Virginia for the exclusive fund. The same variations, however, exist within the stock companies. I find some stock companies performing very good service, but there are others that do not. The same may be said of the mutuals and the self-insurers. There are self-insurers who pay full wages, even giving more than the law specifies. Other self-

insurers do not. So it is difficult to compare one type with another type. I would say, however, that on the whole, comparing the best State funds with the best insurance carriers, the State funds are superior. They are certainly superior as regards cost; they are equal as regards financial security; and they are a little better as regards service. I shall take up those points more in detail later on, but before doing so I wish to present a few general impressions received as a result of my investigation.

Problems peculiar to competitive system.—Certain problems confront commissions in competitive insurance States which do not exist under an exclusive State fund system. In the last analysis a comparison of different types of insurance carriers resolves itself into a comparison of exclusive with competitive systems. From an administrative standpoint a competitive State fund is not much different from a private insurance company. Under an exclusive fund system the commission *does* things. There are no technicalities to nurse, no interminable squabbles, no long delays waiting for the insurance companies to report on a case, no wasting of the commission's time in long drawn out hearings. The commission simply ascertains the facts from reports and investigations and then awards compensation. In a competitive State the commission, instead of doing things, sees to it that somebody else does the work. The commission supervises, follows up, and checks up the insurance carriers who are supposed to make the payments. It takes almost as much time and costs as much money and requires as many employees to do the follow-up work, if it is to be done adequately, as it does to do the work originally.

Under a competitive system the commissions are inclined to govern their administrative practices and to propose statutory amendments to suit the convenience of insurance carriers and employers rather than the interests of the injured workers. We are inclined to forget that a compensation law is a *workmen's* compensation law. It is not an employers' compensation law, nor a physicians' compensation law, nor an insurance companies' compensation law, nor a compensation law for the benefit of those who administer the law. It is for the employee, and the interests of everyone else should be subordinated. Yet these questions continue to crop out, "How will this affect the insurance company? If we don't have a definite provision in the law, we can't do this or that." Under the exclusive State fund it does not make any difference. Rates can be increased or decreased to meet contingencies as they arise and nobody is seriously affected. As an illustration, Oregon this year increased its benefits 30 per cent. This was a flat increase, retroactive, and applied to all persons receiving compensation benefits at the time. The additional cost was met, I believe, out of the surplus of the fund. But had there been no surplus the commission might have increased its rates. This could not be done under a competitive system, because the premiums were collected on the basis of the former benefits.

Again, under the competitive plan you have a dual system of administration. In an exclusive fund State, accidents are reported to the commission only; under a competitive system, accidents are reported by the employer to the insurance company and also to the commission. Furthermore, under the latter system both the in-

insurance company and the commission must receive and investigate compensation claims, which results in unnecessary duplication of effort. In discussing the question of getting prompt and uniform accident reports, compensation commissioners argue somewhat as follows: "The insurance company wants its accident report first. We don't need it right away. We can't expect the employer to make reports to two different bodies or at two different times; therefore, we don't require it." Again, you see it is the idea of serving the employer or the insurance company. The interests of the workman are subordinated. These problems—these difficulties of administration—do not exist under an exclusive State fund system. While the exclusive State fund systems have their problems, which they have by no means solved, they do not have this additional insurance problem which the competitive States have.

State's assumption of liability.—Another point is that in some of the exclusive fund States, especially the Canadian Provinces and Washington, the State assumes responsibility for compensation payments in case of accident. If an accident occurs within the industry covered by the law, the State pays. It gets its premium later or in advance. The workman does not lose out because the employer has not paid his premium. Of course, in most States, if the employer has not insured, the employee can bring suit for damages, but in many cases a judgment is valueless.

Public-service ideal.—Another thing which impressed me was the public-service ideal that I found in so many of the States. We may talk of the evils of politics in State administration, but nevertheless one finds a large proportion of State officials and employees imbued with a high sense of public service. The commissions may not always do their work properly; they may be inefficient—some of them are; but, after all, there is an ideal to follow, to serve one's fellow man, to serve the employee. I was impressed with that, in spite of all the inefficiencies, or many of the inefficiencies, I found.

Politics.—One of the factors which militates against efficiency of administration in industrial commissions is our system of partisan political appointments. The personnel of commissions is constantly changing with the change of political administration. In the State of Washington, for example, there have been 17 commissioners since the creation of the commission in 1911. This continual change in personnel prevents a continuity of policy. Commissioners frequently hesitate to undertake important and constructive policies when their probable tenure of office is only three or four years. Furthermore, this change in personnel effects not merely the commissioners themselves but the entire staff of the commission. Another manifestation of this political system is the interference on the part of large and influential employers with the duties and policies of the commission; for example, the employer in order to prevent the commission from carrying out its policy will appeal to the governor or other political authorities, who, in turn, will diplomatically suggest to the commission to go a little slow in taking drastic action against the employer. As a result the commission, because it is a part of the political administration, will hesitate to antagonize influential employers.

Membership of industrial commissions.—An industrial commission or board should be composed of at least three members representing

both employers and employees. The single commissioner in my opinion is undesirable.

Judicial review.—It is desirable, on the whole, that the commission's decision in compensation cases should be subject to limited review by the courts. Such judicial review will have a tendency to check the assumption of autocratic methods on the part of a commission or commissioner. Especially is it desirable to have a judicial review where the commissioners have long term or life appointment.

Inadequate appropriations and salaries.—Probably the greatest handicap suffered by State funds and industrial commissions is inadequate appropriations and salaries. An industrial commission can not perform its functions properly nor furnish adequate service if it does not have sufficient appropriation to carry out its work and if the salaries provided are so low that high-grade employees can not be retained. The Industrial Commission of Ohio and the State Insurance Fund of New York have been particularly handicapped in this respect. In fact most of the State commissions serve as recruiting ground for private employers and especially the private insurance companies. Great credit is due those employees who, because of their interest in the successful and efficient administration of the fund or commission, remain in the public service although able to command double their salary in private employment.

Cost.

AS already noted, State funds as well as private insurance companies, vary greatly among themselves as regards efficiency in management. However, certain legitimate comparisons can be made between the two types of insurance. I shall first take up the question of cost—cost to the State, to the employee, and to the employer. In order to obtain accurate comparisons, however, it is necessary to distinguish between the accident cost, on the one hand, and the compensation cost of those accidents, on the other. One must also distinguish between cost of administration, cost of insurance, and cost of compensation benefits. We must say what we mean by cost.

Cost to State.—The total cost to the State depends on two factors—the amount of the benefits and the cost of administration, i. e., how much it costs to put those benefits into effect. Ordinarily when we speak of cost to the State, we mean administrative cost. In comparing the administrative cost of one State with another, we must, of course, take into account the number and variety of functions performed, since some State commissions are engaged in more activities than others. It is also necessary to have all the items of expense included. For example, in some States the reported administrative expenses include rent; in others, they do not. Then, too, if we wish to compare the total administrative expense of one State with another, we must take into account the administrative expenses of insurance carriers, including the State funds. Suppose, for illustration, we wish to compare the administrative cost of the exclusive State funds of Ohio, Ontario, or Oregon with the competitive States of, say, Pennsylvania or California. In the first group of States the total cost will be shown by the expenses of the commission; but in the second group of States the total expenses of administering the compensation act will be the administrative expenses

of the commission, plus the administrative expenses of the State fund, plus the expenses of the insurance companies, to say nothing about the expenses of the self-insurers. The difference between the two totals represents the difference in administration costs under exclusive and competitive systems.

The difference in the cost of administering a compensation act under the two systems is brought out in the following table, which shows for specified States the administration expenses of the several types of insurance. The purpose of column 1, showing approximately the number of employees subject to the compensation acts, is to indicate the volume of business performed in each State. Column 2 shows the actual expenses of the commission for administering the compensation law; column 3 shows the actual administrative expenses of the State funds; column 4 shows approximately the administrative cost to the stock insurance companies. The stock company figures were obtained by applying an average expense ratio of $37\frac{1}{2}$ per cent to the earned premiums as reported by the National Workmen's Compensation Service Bureau for the year 1919. Although the stock expense ratio varies in the several States, ranging from 35 to 40 per cent, the application of a flat $37\frac{1}{2}$ per cent will give results sufficiently accurate for the present purpose. In fact, for the total expenses of all private insurance carriers these figures are an understatement, since they do not include the expenses of mutual and reciprocal companies, which were not available, nor do they include the expenses incurred by self-insured employers. The administration expenses for the commissions and State funds are all for the year 1919 except for the following, which are for 1918: Ohio commission, Ontario commission, Idaho fund, Pennsylvania commission and fund.

EXPENSES OF COMPENSATION ADMINISTRATION IN SPECIFIED STATES.

State.	Estimated number of employees subject to act.	Commission. ¹	Fund. ¹	Stock companies. ²	Total.
	1	2	3	4	5
Exclusive fund States:					
Washington.....	191,458	\$172,816.93	.....	.....	\$172,816.93
Oregon.....	98,910	138,902.31	.....	.....	138,902.31
Nevada.....	24,746	32,778.66	.....	.....	32,778.66
Ohio.....	1,008,813	279,596.00	.....	.....	279,596.00
West Virginia.....	212,812	80,422.64	.....	.....	80,422.64
British Columbia.....	90,000	70,705.53	.....	.....	70,705.53
Ontario.....	390,000	152,235.82	.....	.....	152,235.82
Competitive fund States:					
California.....	611,941	175,270.10	\$319,125.11	\$2,088,426.43	2,582,821.64
Idaho.....	50,119	15,542.06	21,160.45	108,522.50	145,225.01
Montana.....	56,826	\$ 27,000.00	.....	69,855.25	96,855.25
Colorado.....	137,157	\$ 56,598.19	.....	280,493.09	337,091.28
Michigan.....	597,585	61,550.94	29,936.60	1,246,371.32	1,337,858.86
Pennsylvania.....	2,149,867	239,587.95	242,170.56	4,384,702.17	4,866,460.68
New York.....	2,503,020	422,447.07	213,800.40	8,750,610.47	9,386,857.94
Maryland.....	188,433	\$ 63,914.99	.....	753,168.21	817,083.20
Private insurance States:					
Massachusetts.....	1,109,134	159,854.95	.....	2,642,602.31	2,802,457.26
Indiana.....	502,729	27,928.62	.....	1,166,299.23	1,194,227.85
Illinois.....	871,890	\$ 119,296.85	.....	2,757,497.28	2,876,794.13
Wisconsin.....	405,009	36,855.11	.....	880,825.02	917,680.13

¹ Figures do not include expenditures for accident prevention, except New York State fund.

² Figures include expenditures for accident prevention. Inspection expenses about 2 per cent of earned premiums.

³ Includes expenses of State fund.

⁴ Includes expenses for administering the conciliation and arbitration act (approximately \$10,000).

A glance at the foregoing table shows the enormous difference in administrative costs between the exclusive and competitive insurance systems. The former are stated in thousands of dollars, whereas the latter run into millions. For example, compare the exclusive State fund of Ontario (\$152,000) with the competitive insurance State of California (\$2,582,000) or the exclusive State fund of Ohio (\$279,000) with the competitive insurance State of Pennsylvania (\$4,866,000) and the private insurance State of Illinois (\$2,876,000).

A comparison of the number of State employees required to administer the compensation act under the different insurance systems may also be of interest. The following tabular statement shows the number of employees in specified exclusive fund States, competitive fund States, and States having no State funds. The figures are for the year 1920, except for Pennsylvania and Illinois, which are for 1919.

NUMBER OF STATE EMPLOYEES ENGAGED IN ADMINISTRATION OF COMPENSATION ACTS IN SPECIFIED STATES.

State.	Commis- sion em- ployees.	Fund em- ployees.	Total.
Exclusive fund States:			
Ohio.....	214	.....	214
Oregon.....	119	.....	119
Washington.....	89	.....	89
West Virginia.....	42	.....	42
Competitive fund States:			
California.....	67	237	304
Pennsylvania.....	126	85	211
Michigan.....	28	16	44
New York.....	263	173	436
Private insurance States:			
Illinois.....	57	.....	57
Massachusetts.....	83	.....	83
Wisconsin.....	22	.....	22

It will be seen that the number of employees in States having exclusive State funds is relatively smaller than in the competitive fund States. This is the logical thing to expect because the former States do not have a dual system of administration. Furthermore, it requires nearly as many employees to administer the compensation act in States having no State funds whatever, if the work is to be done adequately, as it does in the exclusive fund States.

Cost to workmen.—Let us take up the cost to the workman. In the first place, we must distinguish between the *accident* cost and the *compensation* cost. By accident cost I mean the wage loss resulting from the accident. How much of this accident cost does the employee bear and how much does the industry or the employer bear? Most of the laws, as you know, provide that the compensation shall equal a certain percentage of the employee's wage received at the time of the injury. This percentage ranges from 50 to 66⅔. No one, however, should for one moment believe that the injured workman actually receives 50 per cent or 66⅔ per cent of his wages. Practically all of the States, in addition to the percentages, have weekly maximums beyond which the amount of compensation can not go. This not only limits the amount of compensation still further but virtually vitiates and nullifies the percentages. For example, it

is absurd to speak of a State paying $66\frac{2}{3}$ per cent of wages, as is the case in New Jersey, when the same law also provides a weekly maximum of \$12. Therefore, instead of receiving 60, 65, or $66\frac{2}{3}$ per cent the injured workman actually receives only 20, 25, 30, or 35 per cent of his wages. These weekly maximums are unjust to the workers and should be wiped off the statute books or at least raised to a sufficient level to enable the workman to sustain himself while incapacitated.

As regards compensation cost as distinguished from accident cost, Oregon is the only State in which the workman is required to pay a portion of the compensation. In this State he is required by law to pay 1 cent for each working day, which amounts to about 9 or 10 per cent of the total compensation costs. In all of the other States the employer at least pays the compensation provided in the law. However, in many of the Western States the employer has been able under the contract hospital system to place a large part of his compensation cost upon the workman. Under this contract system the employer enters into an agreement with a contract hospital whereby the latter is to take care of his accident cases. The workman is usually charged a dollar a month or more, which is deducted from his wages and turned over to the hospital. This dollar a month frequently pays for the entire cost of the medical service. Thus the employer is relieved of a part of his burden, which is shifted upon the workman. Another, and in my opinion unnecessary, burden which the employee must bear is the payment of attorney's fees. I believe that every injured workman should receive his compensation without any cost to him whatever. It should not be necessary for him to employ an attorney. Nor should he be required to attend a lot of hearings, wasting his time and the time of other witnesses.

Cost to employer.—A comparison of compensation costs to the employers under different insurance systems and in different jurisdictions is difficult of determination. There are two ways of approaching the problem: (1) By comparing insurance rates and (2) by comparing expense ratios. I tried to make a comparison of rates but gave it up because of the difficulties involved. There are too many complicating factors involved which affect the comparability of the result.

First. There is the difference in benefits. No reliable factor has yet been produced which will measure accurately the difference in benefits.

Second. Variations in classifications. You may say that a coal mine is a coal mine whether located in Pennsylvania, Ohio, or Washington. But a comparison of the manuals in the various States will disclose the fact that even a coal-mine classification does not mean the same thing in every State. In addition, you have the problem of interpretation and application of the classification with which to deal.

Third. Identical industries or classifications vary considerably as to hazard in different States.

Fourth. Because of the operation of merit-rating schemes in vogue in most States the manual rates are not the rates actually charged.

Fifth. Even if the foregoing difficulties have been solved and comparable rates obtained, one does not know whether the insurance companies are actually writing business at those rates unless the State keeps strict supervision over rates. In half of the States no supervision is exercised.

Sixth. The policy of State funds and other insurance carriers differs as to dividends and reserves. Among some it is the practice to set the rates high enough to allow the return of dividends and to build up a comfortable reserve and surplus. Among others the rates are barely adequate to cover the cost of the current accidents.

Therefore, a comparison of manual rates in one State with the manual rates in another State does not get one very far.

The other method of comparing costs to employers is by means of the expense ratios of the insurance carriers. Final compensation insurance rates are the product of two factors: (1) The pure premium factor, which represents the actual loss cost, and (2) the expense loading factor, which represents the carrier's administrative expense for putting the benefits into effect. Here one can arrive at certain definite facts. The pure premium factor, i. e., the actual cost of accidents per \$100 of pay roll for each industrial classification, is of course, the same for all carriers for rate-making purposes. The expense factor, however, varies with the type of insurance and reflects the difference in costs of insurance administration. The difference in the expense ratios of stock companies, mutuals, and State funds, therefore, represents the relative cost of compensation insurance to the employer under the different insurance systems. For the employer a comparison of costs under a stock company, a mutual, or a State fund becomes then a simple mathematical calculation.

The expense ratios of stock companies vary from 35 to 40 per cent, the average being about $37\frac{1}{2}$, possibly a little less; i. e., for every dollar of premiums collected by stock insurance companies $37\frac{1}{2}$ cents goes for expenses and profits. The expense ratio of the mutuals ranges from 15 to 20 per cent. The competitive funds average about $12\frac{1}{2}$ per cent, ranging from 6 and 7 to about 15 per cent. The exclusive State funds range from 3 per cent—less than 3 in Ohio—to about 7 or 8 per cent. Using one figure only, the average expense ratios are as follows: Stock companies, $37\frac{1}{2}$ per cent; mutual companies, 20 per cent; competitive State funds, $12\frac{1}{2}$ per cent; and exclusive State funds, $7\frac{1}{2}$ per cent. Applying these percentages to the premium income you will get a comparison of the cost to the employer. I should say that, had every compensation State possessed an exclusive State fund and had all employers carrying compensation insurance insured therein, it would have saved these employers in the year 1919 at least \$30,000,000. In other words, it costs the insured employers of the United States an extra \$30,000,000 to insure in stock and mutual companies. These figures are obtained simply by applying the difference in expense ratios to the total premium income. Of course, I have been assuming that they have the same type of service.

Service.

A SECOND factor in the comparison of compensation insurance systems is service. However, it is difficult to measure service because it does not easily lend itself to statistical proof. Three tests, however, may be applied: (1) Promptness of payment; (2) adequacy or liberality of payments, including liberality in interpreting the laws; and (3) accident prevention.

Promptness of Payments.

As regards promptness of payment the actual cases were taken from the files of various industrial commissions for the years 1917, 1918, and 1919, being distributed as evenly as possible among the three years. The information recorded included date of the accident, date of receipt of accident by commission or fund, date of doctor's report and workman's claim and date such reports were received, date of agreement or award, and date of first payment. The results were tabulated and comparisons made by State and type of insurance. In some of the States I was unable to obtain the date of first payment because the commissions kept no record thereof. In such States I tried to obtain, if possible, the date of the compensation agreement or the date of the commission's award. However, in most States the date of first payment was available.

In order that accurate comparisons may be drawn from the data it will be necessary to take certain factors into consideration.

(1) The length of the waiting period must be taken into account. No payment is due until one week after the expiration of the waiting period. It is not fair, however, to subtract the entire waiting period from the average time between the date of accident and date of first payment, as shown in the tables. No payments can be made until the necessary reports of the accident have been filed with the commission or insurance carrier, and this takes a certain length of time. In fact, a study of the promptness with which accidents are reported in the several States shows that the length of the waiting period seems to be a negligible factor. For example, in Massachusetts, which has a 10-day period, accidents are reported more promptly than in any other State.

(2) A second factor to be taken into account is the practice in the several States as regards frequency of wage payments. In the Far West it is customary among many employers to pay monthly; in the Middle West, biweekly; and in the East, weekly. Since compensation is supposed to be in lieu of wages, the first payment ordinarily is not made until the next regular pay day. Thus the frequency of wage payments will to a certain extent affect the promptness of compensation payments as shown in the table.

(3) A third factor is the size or area of the States compared. In the East the States are small, the population compact, and communication easy and rapid; whereas in the Far West the States are large and the population sparse. Other things being equal, one should expect more prompt payments in Massachusetts or Ohio than in California, Nevada, or British Columbia.

(4) A fourth factor to be considered is the nature of the industry. In the East, where manufacturing predominates, the industries are usually large, compact, and within easy reach of postal and telephone communication. In the Far West, again, many of the industries, such as lumbering or mining, are located in out-of-the-way places where communication is difficult.

The number of cases upon which the averages were based should also be taken into consideration. In some of the States I examined 1,000 or more, while in others the number was less than 100. The number of cases taken depended upon the accessibility of the records and also upon the type of State. In the competitive fund States a larger number of cases was necessary in order to compare the different types of insurance in the State. In the exclusive fund States such comparison was not necessary and consequently the number of cases was smaller. The averages of States in which the number of cases is under 100 should be used cautiously; deductions drawn therefrom are by no means conclusive, but are indicative in the light of other information.

Bearing in mind the foregoing factors, let us see how the several insurance systems in various States compare.

The following table shows the promptness of compensation payments by different insurance carriers in certain States arranged in ascending order. This table is a summary of a more detailed table (facing p. 156). The table includes only those States in which data as to first payments were obtainable; whereas the larger table contains also the States in which only data regarding promptness of awards and agreements were available. Column 2 shows the number of cases examined. Column 3 shows the waiting period for each State as of the year 1919. Column 4 shows the average (median) number of days elapsing between the date of accident and date of first payment. That is, in one-half of the cases the first payment was made before the number of days specified, and in the other half of the cases the first payment was made after that date. Columns 5 and 6 show the percentage of cases in which the first payment was made within 4 weeks and 7 weeks, respectively, from the date of the accident. Columns 7 and 8 show the percentage of cases in which no payment had been made at the end of 11 and 13 weeks, respectively, after the accident. In the case of Illinois and Michigan, the commissions had made an independent investigation, and their results are incorporated in the table. In all other cases the figures are based upon records as found in the files of the commissions.

PROMPTNESS OF COMPENSATION PAYMENTS BY DIFFERENT INSURANCE CARRIERS
IN CERTAIN STATES, ARRANGED IN ASCENDING ORDER.

State and insurance carrier.	Num- ber of cases.	Wait- ing pe- riod (days).	Average interval (median) between date of accident and date of first payment (days).	Per cent of cases in which first payment was made within —		Per cent of cases in which no payments had been made at end of —	
				4 weeks after acci- dent.	7 weeks after acci- dent.	11 weeks after acci- dent.	13 weeks after acci- dent.
1	2	3	4	5	6	7	8
California (State fund).....	404	7	26	58.1	83.8	6.3	4.1
Idaho (self-insurers).....	190	7	26	54.2	81.0	6.7	5.7
Oregon (State fund).....	403	0	28	54.1	87.1	2.7	1.7
Michigan (stock companies) ²	187	7	34	40.6	78.6	7.4	5.8
Michigan (self-insurers) ²	153	7	34	30.1	67.3	11.8	7.2
Maryland (State fund).....	172	14	35	38.3	69.7	13.8	9.6
Indiana (insurance companies).....	90	7	35	43.3	66.7	13.2	8.8
Nevada (State fund).....	204	7	36	29.9	77.5	4.4	3.4
Utah (State fund).....	49	3	38	36.8	75.5	12.2	10.2
British Columbia (State fund).....	118	3	41	15.2	76.2	8.4	5.1
Idaho (insurance companies).....	446	7	41	28.4	62.7	17.5	12.6
Illinois (stock companies) ¹.....	.....	7	44	.....	.....	.....	.....
Montana (self-insurers).....	704	14	45	13.3	60.1	11.8	8.4
Montana (State fund).....	355	14	46	7.9	61.2	10.6	8.2
Michigan (State fund).....	30	7	48	13.3	53.2	33.4	33.4
Washington (State fund).....	308	7	49	9.1	51.3	17.4	12.9
Colorado (insurance companies).....	82	10	49	12.2	51.2	23.2	14.6
Illinois (mutual companies) ¹.....	.....	7	51	.....	.....	.....	.....
Illinois (interinsurers) ¹.....	.....	7	52	.....	.....	.....	.....
Colorado (self-insurers).....	41	10	54	9.8	44.2	24.4	19.5
Illinois (self-insurers) ¹.....	.....	7	54	.....	.....	.....	.....
Colorado (State fund).....	21	10	54	19.1	42.9	19.2	9.6
Ohio (State fund).....	1,000	7	55	8.1	44.7	25.7	17.8
West Virginia (State fund).....	184	7	59	7.6	35.8	32.6	21.1
Montana (stock companies).....	207	14	65	6.7	31.0	36.2	26.1
Idaho (State fund).....	176	7	80	4.5	24.9	50.4	38.0
Michigan (State fund) ²	16	7	84	0.0	18.7	56.2	50.0

¹ Arithmetic average. Includes all cases for 1919. Computations made by Illinois Industrial Commission.² Computation based upon investigation by Michigan Industrial Accident Board.

An examination of the above table shows that State funds have the best record and also the worst. Second, it shows great variations in each type of insurance carrier. Third, it shows that self-insurers, whom one would naturally expect to pay promptly, are just as slow in paying compensation as the casualty companies or State funds. Fourth, it shows an unconscionably long delay on the part of all carriers. Fifth, it effectively answers the argument of the insurance companies that they are more prompt in making compensation payments than the State funds.

Of the six exclusive State funds, three (Oregon, Nevada, and British Columbia) have a better record as regards promptness of payment than the average private insurance company. In the other three States (Ohio, Washington, and West Virginia) the reverse is true. In most of the competitive fund States payments are made and claims handled more promptly by the State fund than by other insurance carriers. Moreover, it should be noted that the two competitive funds having the poorest records are not under the jurisdiction of compensation commissions, but are under the supervision of insurance departments.

Probably the fairest and most convincing method of comparing State funds with private carriers would be to compare the best in each class. Let us, then, compare the competitive fund of California and the exclusive fund of Oregon with the Liberty Mutual Co. of Massachusetts as shown by its own figures. Please bear in mind that the area of Massachusetts is small and the industries compact. Both California and Oregon are large States, and in each State lumbering is one of the principal industries. It takes a longer time to obtain reports and to make payments. Under the circumstances one would expect to find much better results in Massachusetts. But what are the facts? The percentage of cases in which the first payment had not been made within 6 weeks⁴ are as follows: Liberty Mutual, 20 per cent; Oregon State fund 18.9 per cent; California State fund 22.1 per cent. Oregon, in spite of its large area, had a better record and California almost as good as the Liberty Mutual. Now take the percentage of cases where the first payment had not been made within 10 weeks: The Liberty Mutual, 6.3 per cent; the Oregon fund, 3.9 per cent; the California fund, 6.5 per cent. Again Oregon has a much better record and California equally as good as the Liberty. There you have a fair test, it seems to me, and it shows that the best State fund has a better record as to promptness of payment than the very best insurance company.

This long delay in making payments is due, at least so far as the State funds are concerned, to a number of causes. In the first place employers and physicians are not always prompt in reporting the accident. It is more difficult still to get the workmen to report the case. In fact much of the delay is the direct result of the failure of the workmen to make a claim. Then, too, the commissions must partially share the blame because they have inadequate follow-up methods or because their procedure is too complicated. Furthermore, several of the funds whose record is bad make no attempt to pay compensation promptly. Many of the commissions and funds are also handicapped in that they have an insufficient force to handle the claims properly and to make the necessary investigations.

Adequacy or Liberality of Payments.

A second test of service is the adequacy or liberality of compensation payments, including liberality of interpretation of the acts. Are the benefits as provided in the laws actually being paid or is there a tendency among insurance carriers to fight compensation claims, to resort to technicalities, to make settlements for less than the law provides, to make understatements as to the severity of injuries, or to make no offer of payment, hoping the injured workman will neglect to press his claim? These questions do not readily lend themselves to statistical proof. The most reliable method of attacking the problem would be to make an investigation of a certain number of actual cases in each State and ascertain just what was done. Because of limited means such a study was not made by the Bureau. Several States, however, have made such investigations. Among these are the Connor investigation in New York and a study of insurance companies made by the Industrial Commission of Illinois.

⁴ In case of the Liberty Mutual 40 days should be substituted for 6 weeks.

First let us take up the State funds. In most of the State fund States it is the policy of the commission to be liberal in making awards to claimants. Where the State fund is under the jurisdiction and supervision of the industrial commission, the latter seldom allows a State fund to appeal from the decision of the commission to the courts, whereas self-insurers and private insurance companies, of course, have such right of appeal. Again, the commissions are inclined to disregard legal technicalities and even to resort to extra legal means to award compensation in meritorious cases—practices which are estopped when the insurance carrier is a party in the case. As so well said by Commissioner Pillsbury, State funds are warm-blooded financial institutions whereas private insurance carriers are cold-blooded institutions.

Not all of the State funds, however, have adopted the policy of liberal interpretation. Three State funds (West Virginia, Washington, and Michigan) seem to have interpreted the compensation law more in the interest of the employer than of the injured workman. In Washington the commission in rendering decisions against the workman has been repeatedly overruled by the courts. Moreover, in this State the procedure relative to claim payments is so hedged about with formalities, many of which seem unnecessary, that the injured workmen suffer as a consequence. In West Virginia, of 183 cases selected at random I found that 19 per cent received only the weekly minimum of \$5, 28 per cent received less than \$7, 40 per cent received less than \$9, and only 32 per cent received the maximum of \$12. Most of these cases represented coal miners and were for the year 1919. These absurdly low weekly compensation amounts were due to two causes: (1) To the peculiar interpretation the commissioner has placed upon the weekly wage provision of the law, and (2) to the fact that in many cases no thorough attempt was made to obtain the actual wages of the worker. The commissioner determines the weekly wages by dividing the actual earnings for stated periods of 2, 4, 6, or 12 months by the number of weeks actually worked in those periods. For example, if an employee worked only five days in a two months' period his earnings for these five days would be considered his earnings for two months. Only wages earned from other employers in the same or similar industries are taken into account. The commissioner requests the last employer to furnish the workman's wages from other employers, stating in his form request that unless such wage data are received the workman will be given the minimum compensation. In Michigan the State fund is under the supervision of the insurance department and of a board of directors representing the policyholders of the fund. The fund is not only exceedingly slow in making compensation payments, but is constantly at odds with the industrial commission over the proper handling of its claims.

Two important investigations—one in New York and one in Illinois—have brought out certain facts regarding the practices of insurance companies. In New York, at the request of the governor, Mr. J. F. Connor last year made an exhaustive investigation into the management and affairs of the New York Industrial Commission. This investigation made public several highly significant facts. Among the most important of these was the large number of underpayments of compensation claims on the part of the employers and

insurance carriers, particularly self-insurers and stock companies. Of 1,000 unselected cases of direct settlements 114 were found to have been underpaid. This underpayment amounted to \$52,279.84, or \$459 per case. The total underpayments on the basis of the 1,000 cases would amount to \$1,400,000 annually. An analysis of the 114 cases shows that the private stock companies and the self-insured employers were especially guilty of this "short-changing" practice. The following table shows the average amount originally paid by direct settlement and the additional amount awarded after investigation and rehearing, classified by type of insurance:

AVERAGE AMOUNT ORIGINALLY PAID BY DIRECT SETTLEMENT IN 114 COMPENSATION CASES AND AVERAGE ADDITIONAL COMPENSATION AWARDED ON REHEARING.

Type of insurance.	Number of underpaid cases.	Average amount originally paid by direct settlement.	Average additional compensation awarded on rehearing.
Stock insurance companies.....	79	\$114	\$383
Mutual insurance companies.....	6	29	61
Self-insurers.....	29	157	747
Total.....	114	120	459

The Illinois Industrial Commission has legal authority to examine into the operation of casualty insurance companies doing business in the State. Under this authority the commission has investigated seven or eight companies. Some were found to be all right. Others—four companies in particular—were found to be very bad. One of these companies was a reciprocal, one was a mutual, and two were stock companies. The following is a summary of the reports of the commission's investigator. Permission to make use of these reports, which are in typewritten form, was granted to the Bureau by the industrial commission.

Reciprocal company.—The commission found that the total working staff of one reciprocal company consisted of an attorney in fact and one part-time female employee. The books had not been posted for six months. The company had a deficit of \$19,578. Lump-sum settlements had been made without the approval of the industrial commission. The rates charged were too low for safety. No accident prevention work had been done. Of 27 unpaid claims 12 were over three months due and some six or eight months. The investigator found 110 cases of underpayment, the maximum underpayment being \$102.50. One hundred and eighty-one cases needed investigation; most of these were either permanent partial disability or indeterminate temporary disability cases. Nothing had been paid in most of these 181 cases.

Stock company A.—After examining into the conditions of this company the investigator reported to the commission as follows:

I find that where compensation has been paid injured employees there has been no picayunish shaving of the amount provided by the workmen's compensation act, but there have been numerous cases where compensation was due and not paid. * * * You will note in most of them a disposition not to play fair with the injured employee and to take advantage of technicalities and avoid payment on the flimsiest of excuses.

In justice to the present claim manager it should be stated that since July 1, when he assumed charge of claim settlements, there has been a decided improvement in the handling of these matters, but his predecessor seemed to think that it was all right to avoid paying compensation if he could "get away with it." The home office of the company was aware of this state of affairs and in some cases complimented him for his ingenuity in avoiding payment.

In several cases settlement contracts have been drawn up and signed by the injured employees and payment made in a lump sum without any order from the commission and without filing the settlement contract with this office. The usual excuse given in these cases to the home office was that the local claim manager knew that the commission would not approve such a settlement. The home office acquiesced in the handling of such cases, and not once did they advise the claim agent that such a procedure was wrong, both from the legal and moral viewpoint.

The following cases were taken from the investigator's report as exemplifying the practice of this company as regards its settlement of claims:

Case No. 1. A boy had lost four fingers by amputation. "The only reason given for not paying compensation was that no written claim was made within six months."

Case No. 2. "Della H— was employed by the D— Lunch Co. Dr. W—, in his report to the insurance company, states that this employee has lost the use of the first phalange and offers the gratuitous advice that after she goes back to work she would forget all about the compensation for loss of use, and, further, he believed that the industrial commission would undoubtedly award her for such loss of use if the case was brought before it." Therefore nothing was paid her except for temporary total disability.

Case No. 3. The claim agent of the insurance company had required the injured employee to sign a receipt for \$120 but paid him only \$100, "and advised the home office that he saved the expense of an arbitration and, in addition, \$20 by not going before the commission with this settlement."

Stock company B.—With respect to this company the commission's investigator reports that the local adjuster was overzealous to serve the company's interests. The investigator discovered 64 cases of underpayment, the maximum underpayment being \$330. The insurance company had not been reporting their accidents or filing compensation receipts. The following two cases were taken from the investigator's report:

Case No. 1. An injured employee had lost an eye on which a cataract had formed. The local adjuster wrote to the home office as follows: "I will endeavor to dispose of it in the best manner possible without letting it go to the industrial board if we can arrange to keep it from doing so." The home office replied as follows: "I note that the injured probably had a small percentage of vision before this accident. This may be a dangerous case to permit to go to the board."

Case No. 2. The following letter was sent by the adjuster to the home office: "For your information would state that this injured did not return to work for the assured, and we are not tracing him up to see if he is working at the present time, as we do not wish to stir up a claim."

Mutual company.—In its investigation of one mutual company the commission reports that said company was unduly technical in the settlement of claims. Furthermore, that the company sought the assistance of its assured employers in hushing up cases. Average wages were found to be incorrectly determined. There were found 17 cases of underpayment, the maximum underpayment being \$21. Twenty-six cases were questionable and needed investigation. In many of these 26 cases the company denied liability. In one case involving concussion of the brain the insurance company doctor wrote to the company as follows: "I would again suggest that if it were possible for B— & Co. to discharge him after he had worked awhile I am sure it would be advisable."

In view of the foregoing facts it is difficult to regard seriously the contentions of private insurance companies that they furnish better service than do the State funds. Nor are the above conditions peculiar to Illinois and New York. Similar investigations in other States would undoubtedly disclose a similar condition.

Prof. Whitney states that "the stock and mutual companies both spend about 7 per cent of the premium for claim adjustment, the monopolistic State funds spend only 1 or 2 per cent," while some of the competitive funds spend 3 or 4 per cent. Prof. Whitney further states that "the greater economy of monopoly can not explain the whole discrepancy between the cost of adjustment under private insurance and under a monopolistic State fund. The balance of the difference is explained by the fact that proper claim adjustment can not be made for 1 per cent or anything like it. * * * The workman not only should get what he is entitled to but he should get it promptly." All of which is very true. But the conclusions Prof. Whitney draws from the foregoing premises are hardly justified by the facts. He says:

However, I do not know of any reason for thinking that any part of the 7 per cent that is spent by the stock companies and mutual companies is wasted. I am inclined to think that these are the very carriers which can be trusted to give exactly the proper emphasis to this part of the work. With them the tendencies toward economy on the one side and toward thoroughness on the other are better balanced than under monopolistic State control, where the tendencies are strongly in the direction of narrow economy and perfunctory treatment.

From the insurance company's point of view the expenditure of 7 per cent for claim adjustment may not be wasted. But from the social or employee's standpoint the amount expended is not necessarily a true test of service performed. How much of this 7 per cent is spent in the interest of the employee and how much is spent to defeat the employee's interests? The Illinois and New York investigations show that as far as some insurance companies are concerned the inclination to dispense justice is not particularly strong.

Accident Prevention.

The third test of service is the quantity and quality of effective accident prevention work performed by the different types of insurance carrier. In this department of compensation administration both industrial commissions and State funds are weak. Most of the compensation commissions are not authorized by law to do safety work. Moreover, unfortunately, many commissioners take no interest in accident prevention, holding that their functions are primarily judicial. As regards competitive State funds New York is the only State in which one of the regular functions of the fund is accident prevention. California performs excellent safety work, but this work is done by the industrial commission apart from the State fund. In some of the exclusive State funds the industrial commissions have undertaken comprehensive safety campaigns. In most of the compensation States, however, the accident prevention work—such as it is—is done by other State departments, usually the factory inspection department.

On the other hand, many of the private insurance companies have well-organized safety departments and are doing excellent safety

work. However, it is difficult to measure the effectiveness of the safety work actually performed because there are few reliable statistical data showing reduction in accident severity rates. Frequently the inspection work of the insurance companies is done for competitive purposes. That is, much of their inspection is done to get or keep business irrespective of whether or not it results in actual reduction of accidents.

Security.

THE third test for comparing compensation insurance systems is security—security to both employer and employee. When an employer in good faith insures his risk in a responsible authorized insurance company he should be protected against further liability. But, on the other hand, the employee should not be deprived of his compensation benefits through or because of the insolvency of the employer or the insurance carrier. The employees' interests are paramount and should be given first consideration.

Stock insurance companies.—The security or solvency of private stock companies depends first upon adequate insurance rates and second upon sufficient reserves. Both should be under the strict supervision and regulation of the State. No company can long maintain its solvency with inadequate rates. Under stress of cutthroat competition the temptation to reduce rates below the safety level becomes too great to resist. State regulation is necessary to maintain the solvency of the insurance carrier and to protect the compensation rights of injured employees. But notwithstanding these obvious facts nearly one-half of the compensation States make no provision for rate regulation. Small wonder then that such a state of affairs has resulted in several disastrous failures during the past three or four years. The failure of such companies as the Guardian Casualty & Guaranty Co. of Utah, the Casualty Co. of America, and the Commonwealth Bonding & Insurance Co. of Texas resulted in thousands of dollars of unpaid compensation claims. In those States in which the law held both the employer and insurer individually liable these losses had to be met by the employers. In other States, in which employers are relieved of further liability when insured, the injured claimants were the sufferers. The Legislature of California appropriated between \$60,000 and \$70,000 of public money to pay in full the larger claims of injured employees because of the bankruptcy of the Commonwealth Bonding & Insurance Co. of Texas. Many smaller claims have not yet been taken care of. Whether the State should, as maintained by some, either guarantee the solvency of insurance companies authorized to do business or make good the losses directly out of the State treasury where such insolvency is due to lax insurance laws or their administration is not here discussed. By no means, however, should the injured employee be permitted to suffer.

Mutual companies.—The provisions as to the adequacy of rates and reserves for stock companies should apply also to mutuals. In certain States, however, mutual companies, because of their lower expense ratio, are allowed to issue rates lower than those demanded of stock companies. As to the advisability of this practice insurance actuaries differ. Employers insured in mutual companies, however,

are subject to assessment in the event that the losses exceed the premiums. The mutual plan, therefore, seems to offer a greater degree of security to the employee and a less degree to the employer than stock companies. No large mutual company has failed as yet.

State funds.—Not a single injured employee has lost one cent of compensation through the financial failure of State funds, either competitive or exclusive. The nearest approach to this condition was in Washington in the case of a powder explosion, the first year the act became operative. One large powder manufacturer questioned the constitutionality of the act and refused to pay its premium into the fund. Until the constitutional question was decided this one classification was temporarily insolvent, with the result that the dependents of the workman killed in the explosion were delayed in receiving their compensation benefits.

The question of failure or insolvency is practically inconceivable as far as the exclusive State funds are concerned. If the premium income is insufficient to meet the year's losses it is only necessary to increase the rates. This is also true as regards the funds in some of the competitive fund States. In other competitive fund States, New York for example, the employer when insured in the fund is relieved of all further liability. The fund therefore becomes the employee's sole protection. Nor does any State having such a fund assume liability in case of the fund's insolvency. On the contrary, some of the States specifically disclaim liability beyond the amount of the fund. Since no State fund has as yet become insolvent the policy of the State as regards compensation claims in the event of the fund's insolvency can not be ascertained. However, its probable attitude may be seen from the experience in California where, as already noted, the legislature of the State appropriated over \$60,000 to pay claims resulting from the bankruptcy of a private stock insurance company.

Some of the competitive funds are not required to and do not report their experience to the State insurance department as private companies must. It is maintained, moreover, that because their right to reject undesirable risks is circumscribed by law, State funds should have greater freedom than private insurance companies with respect to rates. It is further contended that the power of supervision over rates, if exercised by a hostile insurance department, could hamper if not actually put a State fund out of business.

Self-insurers.—Practically all of the compensation States except those having strictly exclusive State funds permit employers to carry their own risk subject to such safeguards as the law may prescribe. About one-half of the compensation laws require self-insured employers either to furnish proof of solvency or to deposit such security as is required by the compensation commission or insurance department. In other States they must deposit security in addition to furnishing proof of solvency. Few of the State commissions, however, require deposit of security in every case. They hold that it is not necessary in the case of large companies with unquestioned assets. The filing of mere financial statements, however, showing the assets and liabilities, is an insufficient guaranty of ability to meet long-continuing payments or to withstand a catastrophe successfully. The financial statement of a Wisconsin self-

insurer showed net assets of \$5,000,000, yet the concern shortly afterwards went into the hands of a receiver.

Experience as to self-insurance has been reported to the Bureau by the compensation commissions of 21 States. In 15 of these States no self-insured employer has failed or gone into the hands of a receiver; 3 States reported one failure each and 1 State reported two failures, but in all these cases the compensation claims were paid either by the receiver or through security which had been deposited. Only 2 States reported failures—1 small concern in each State—which resulted in several claims being unpaid.

While the security record of self-insurers has been excellent, this favorable experience may be due in part to good fortune or pure chance. It is also quite possible that compensation commissions are not always cognizant of every failure of self-insured employers, because such failures may not be reported to them. This was actually the case in Illinois. In such cases the injured claimant usually consults an attorney, who takes the matter before a bankruptcy court and the commission remains in ignorance of the facts.

Self-Insurance.

MOST of the comparisons made heretofore were principally between private casualty companies and State funds. I wish now to review briefly the self-insurers, i. e., those employers who under certain conditions are permitted to carry their own risks. The self-insurance privilege is usually limited to the larger employers.

Probably the greatest social benefit derivable from self-insurance is the impetus it gives to accident prevention. Self-insured employers at least have a strong incentive to prevent accidents because there exists a more direct relationship between their accidents and compensation costs. They are also in a position to pay compensation promptly but, strange as it may seem, their record in this respect is no better than either the State funds or private companies.

One important objection to self-insurance is that it introduces the incentive to deny or pare compensation claims, since the total accident cost to the employer is dependent not only upon the number and severity of his accidents but also upon the cost of those accidents. Consequently, if he can evade payment or reduce the amount he will thereby reduce his total accident cost. Many self-insured employers do not resort to such practices. They pay not only what the law specifies but some even pay full wages during disability and furnish unlimited medical service. However, I am informed by a number of industrial commissions that many self-insured employers take advantage of their peculiar position under the law to evade their just compensation obligations. Some of these employers will make a great show of generosity as regards temporary disabilities, but suddenly develop a niggardly or technical spirit in case of major permanent disabilities or other costly injuries.

Probably the most important objection to self-insurance is that it makes the employer practically the final arbiter in the settlement of compensation cases. The unwillingness of the employees to antagonize their employer through fear of losing their jobs will many times prevent them from appealing to the industrial commission.

This latent power of intimidation possessed by self-insured employers, though they may be entirely just, effectively inhibits injured workmen from seeking redress from the commission. The commission, moreover, since it obtains its information from the accident reports of the employer, is not in a position to judge the merits of the case unless the injured employee brings the matter to its attention.

Summary Conclusions.

THE cost of compensation insurance to employers under different insurance systems may be indicated by their expense ratios. The average expense ratio of stock companies is approximately 37½ per cent; of mutual companies, about 20 per cent; of competitive State funds, about 12½ per cent; and of exclusive State funds, from 5 to 7½ per cent. Under an exclusive State fund, therefore, the cost to employers would be 30 per cent less than under stock insurance and 12½ per cent less than under mutual insurance. The total saving to insured employers of the United States, if all were insured in exclusive State funds, would be over \$30,000,000 annually. This figure is obtained by applying the differences between the expense ratios of the exclusive State fund and stock and mutual companies to their respective annual premiums.

Service.—As regards service comparisons are difficult because of the great variations among different insurance systems. As to promptness of payments there is little to choose among the different types of insurance carriers. Some of the State funds have the best record while some have the poorest. The same thing may be said with respect to stock and mutual companies. However, a comparison of the best managed State fund with one of the best managed private companies shows that the best State fund is more prompt in its payments than the best private company. Another significant fact developed by the investigation is that self-insured employers, whom one would expect to pay promptly, are no more prompt in this respect than either State funds or private carriers. As regards liberality of payment most of the State funds are more liberal in this respect than either stock or mutual companies. As regards accident prevention some of the private companies are doing excellent safety work whereas few of the State funds have done any effective safety work.

Security.—Thus far no injured workman has lost one cent of compensation because of the insolvency of State insurance funds, nor has any large mutual company become insolvent. On the other hand, there have been several disastrous failures of private stock companies during the last three or four years. These failures have resulted in hundreds of thousands of dollars in unpaid claims. As regards self insurance, the experience of 21 States has been reported to the United States Bureau of Labor Statistics. In 15 of these States no self-insured employer has failed or gone into the hands of a receiver; 3 States reported one failure each and 1 State reported two failures, but in all these cases the compensation claims were paid either by the receiver or through security which had been deposited. Only two States reported failures—one small concern in each State—which resulted in several claims being unpaid.

COMPARISON

Period (in days).	STATES HAVING EXCLUSIVE STATE FUNDS.														
	Oregon.	Nevada.	British Columbia.	Washington.	Ohio.	West Virginia.	Montana.			Utah.	Colorado.				
	Interval between date of accident and date of approval of award. ²	Interval between date of accident and date of approval of award. ²	Interval between date of accident and date check mailed. ¹	Interval between date of accident and date of first payment.	Interval between date of accident and date of hearing. ²	Interval between date of accident and date of voucher. ²	Interval between date of accident and date of first payment.			Interval between date of accident and date of voucher. ²	Interval between date of accident and date of receipt of first payment.			Interval between date of accident and date of receipt of first payment.	
							Fund.	Stock.	Self.	Fund.	Fund.	Private.	Self.	Fund.	
	403 cases.	204 cases.	118 cases.	308 cases.	1,000 cases.	184 cases.	355 cases.	207 cases.	704 cases.	49 cases.	21 cases.	82 cases.	41 cases.	1 cases.	
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	
1 to 7.....	1.2		0.8				1.4	0.5	1.3	4.1					
8 to 14.....	13.4	2.0													
15 to 21.....	18.9	10.3	5.9	4.2	1.1	0.5	1.7	1.9	3.8	14.3	4.8	3.7	4.9		
22 to 28.....	20.6	17.6	8.5	4.9	7.0	7.1	4.8	4.3	8.2	18.4	14.3	8.5	4.9		
29 to 35.....	16.6	21.1	21.2	14.0	13.1	11.4	6.5	5.3	14.3	12.2	9.5	12.2	10.0		
36 to 42.....	10.4	16.7	16.9	15.9	13.3	9.2	25.1	10.0	18.6	18.4	14.3	12.2	4.9		
43 to 49.....	6.0	9.8	22.9	12.3	10.2	7.6	21.7	9.0	13.9	8.1		14.6	19.5		
50 to 56.....	4.5	8.8	4.2	11.7	9.3	8.7	9.9	7.7	11.9		14.3	6.1	10.0		
57 to 63.....	3.7	3.9	5.9	8.1	7.5	6.0	9.0	9.2	5.8	2.0		10.0	7.3		
64 to 70.....	.7	3.4	3.4	5.8		6.5	6.5	10.6	6.5	2.0		6.1	12.2		
71 to 77.....	1.2	2.0	1.7	4.5	12.8	10.3	2.8	5.8	3.7	8.1	23.8	3.7	2.4		
78 to 84.....	.5		.8	3.6		8.2	1.1	4.8	2.0	2.0	4.8	3.7	4.9		
85 to 91.....	.5	1.0	2.5	1.9		3.3	1.4	5.3	1.4		4.8	4.9			
92 to 121.....		3.4	3.4	7.8	10.1	10.3	3.9	12.1	4.4	6.1	4.8	6.1	14.6		
122 to 151.....			1.7	1.9	4.1	6.5	2.0	3.9	1.7		4.8	7.3	4.9		
152 to 182.....	1.7			1.9	1.5	3.8	.6	1.4	1.0						
183 and over.....				1.3	2.1	.5	1.7	8.7	1.3	4.1		1.2			
Total.....	99.9	100.0	99.8	99.8	100.0	99.9	100.1	100.5	99.8	99.8	100.2	100.3	100.5		
Median (in days)....	28	36	41	49	55	59	46	65	45	38	54	49	54		
Claims paid or settlements made within—	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	
2 weeks.....	14.6	2.0	0.8				1.4	0.5	1.3	4.1					
3 weeks.....	33.5	12.3	6.7	4.2	1.1	0.5	3.1	2.4	5.1	18.4	4.8	3.7	4.9		
4 weeks.....	54.1	29.9	15.2	9.1	8.1	7.6	7.9	6.7	13.3	36.8	19.1	12.2	9.8		
5 weeks.....	70.7	51.0	36.4	23.1	21.2	19.0	14.4	12.0	27.6	49.0	28.6	24.4	19.8		
6 weeks.....	81.1	67.7	53.3	39.0	34.5	28.2	39.5	22.0	46.2	67.4	42.9	36.6	24.7		
7 weeks.....	87.1	77.5	76.2	51.3	44.7	35.8	61.2	31.0	60.1	75.5	42.9	51.2	44.2		
8 weeks.....	91.6	86.3	80.4	63.0	54.0	44.5	71.1	38.7	72.0	75.5	57.2	57.3	54.2		
9 weeks.....	95.3	90.2	86.3	71.1	61.5	50.5	80.1	47.9	77.8	77.5	57.2	67.3	61.5		
Claims unpaid or settlements not made at end of—															
13 weeks.....	1.7	3.4	5.1	12.9	17.8	21.1	8.2	26.1	8.4	10.2	9.6	14.6	19.5		
12 weeks.....	2.2	4.4	7.6	14.8	25.7	24.4	9.6	31.4	9.8	10.2	14.4	19.5	19.5		
11 weeks.....	2.7	4.4	8.4	18.4	25.7	32.6	10.7	36.2	11.8	12.2	19.2	23.2	24.4		
10 weeks.....	3.9	6.4	10.1	22.9	38.5	42.9	13.5	42.0	15.5	20.3	43.0	26.9	26.8		
9 weeks.....	4.6	9.8	13.5	28.7	38.5	49.4	20.0	52.6	22.0	22.3	43.0	33.0	39.0		

¹ Data compiled by State industrial commission.² Check mailed 2 days later. These 2 days have been

COMPARISON OF COMPENSATION INSURANCE SYSTEMS AS TO I

STATES HAVING COM

Idaho.	Colorado.			Maryland.				Idaho.			California.	
Interval between date of accident and date of first payment.	Interval between date of accident and date of receipt of first payment.			Interval between date of accident and date of first payment.	Interval between date of accident and date of award.			Interval between date of accident and date of first payment.			Interval between date of accident and date of first payment.	Interval between date of accident and date of first payment.
Fund.	Fund.	Private.	Self.	Fund.	Fund.	Private.	Self.	Fund.	Private.	Self.	Fund.	Fund.
49 cases.	21 cases.	82 cases.	41 cases.	172 cases.	15 cases.	90 cases.	37 cases.	176 cases.	446 cases.	190 cases.	404 cases.	12 cases.
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
4.1	4.8	3.7	4.9	2.9	6.7	3.3	2.7	0.6	3.1	16.8	11.4	11.4
14.3	14.3	8.5	4.9	11.6	6.7	11.1	2.7	2.8	12.3	21.1	25.2	25.2
18.4	14.3	8.5	4.9	23.8	33.3	11.1	2.7	1.1	13.0	16.3	21.5	21.5
12.2	9.5	12.2	10.0	12.8	20.0	26.7	29.7	5.1	12.6	12.6	10.9	10.9
18.4	14.3	12.2	4.9	9.3	13.3	20.0	27.0	6.8	13.0	6.8	8.9	8.3
8.1	14.3	14.6	19.5	9.3	13.3	16.6	16.2	8.5	8.7	7.4	5.9	16.7
14.3	6.1	10.0	5.2	5.2	5.6	2.7	5.1	7.4	5.8	5.4	8.3	8.3
2.0	10.0	7.3	7.0	6.7	2.2	2.7	9.1	5.4	3.2	2.2	16.7	16.7
2.0	6.1	12.2	3.5	6.7	2.7	2.7	6.8	4.9	2.6	1.7	16.7	16.7
8.1	23.8	3.7	2.4	.6	2.2	2.7	3.4	2.0	.5	.2	16.7	16.7
2.0	4.8	3.7	4.9	1.7	2.7	2.7	6.2	1.8	.5	1.7	16.7	16.7
4.8	4.9	2.3	2.3	1.1	2.7	2.7	6.2	3.1	.5	.5	16.7	16.7
6.1	4.8	6.1	14.6	5.2	2.2	2.7	15.3	5.4	2.6	2.7	2.7	2.7
4.8	7.3	4.9	1.7	1.7	1.1	1.1	9.1	3.4	2.1	.2	.2	.2
1.2	1.2	1.2	1.2	1.2	2.7	2.7	6.8	1.8	.5	1.0	1.0	1.0
4.1	1.2	1.2	1.7	1.7	1.1	2.7	6.8	2.0	.5	.2	.2	.2
99.8	100.2	100.3	100.5	99.8	100.0	99.9	99.9	99.7	99.9	99.8	99.6	100.1
38	54	49	54	35	31	40	40	80	41	26	26	63
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
4.1	4.8	3.7	4.9	2.9	6.7	3.3	2.7	0.6	3.1	16.8	11.4	11.4
18.4	14.3	8.5	4.9	14.5	13.4	14.4	5.4	3.4	15.4	37.9	36.6	36.6
36.8	19.1	12.2	9.8	38.3	46.7	41.1	5.4	4.5	28.4	54.2	58.1	58.1
49.0	28.6	24.4	19.8	51.1	66.7	61.1	35.1	9.6	41.0	66.8	69.0	69.0
67.4	42.9	36.6	24.7	60.4	80.0	61.1	62.1	16.4	54.0	73.6	77.9	8.3
75.5	42.9	51.2	44.2	69.7	93.3	77.7	78.3	24.9	62.7	81.0	83.8	25.0
75.5	57.2	57.3	54.2	74.9	93.3	83.3	81.0	30.0	70.1	86.8	89.2	33.3
77.5	57.2	67.3	61.5	81.9	100.0	85.5	81.0	39.1	75.5	90.0	91.4	50.0
10.2	9.6	14.6	19.5	9.6	4.4	8.1	38.0	12.6	5.7	4.1	4.1	16.7
10.2	14.4	19.5	19.5	12.1	5.5	10.8	44.2	15.7	6.2	4.6	16.7	16.7
12.2	19.2	23.2	24.4	13.8	5.5	13.5	50.4	17.5	6.7	6.3	16.7	16.7
20.3	43.0	26.9	26.8	14.4	7.7	16.2	53.8	19.5	7.2	6.5	33.4	33.4
22.3	43.0	33.0	39.0	17.9	14.4	18.9	60.6	24.4	9.8	8.2	50.1	50.1

2 days later. These 2 days have been added to the median.

² The periods are 1 day

AS TO PROMPTNESS IN CLAIM PAYMENTS AND PROCEDURE.

HAVING COMPETITIVE STATE FUNDS.

California.	New York.			Pennsylvania. ¹							Michigan.				
	Interval between date of accident and date of hearing.			Interval between date of accident and date of approval of agreement. ³							Interval between date of accident and date of first payment.	Interval between date of accident and date agreement received. ¹			
and.	Fund.	Private.	Self.	All insurance carriers.	All self-insurers.	Fund.	First largest stock company.	Second largest stock company.	Third largest stock company.	Largest mutual company.	Fund.	Fund.	Stock.	Mutual.	Self.
04 cases.	12 cases.	125 cases.	18 cases.	4,093 cases.	3,587 cases.	478 cases.	840 cases.	335 cases.	334 cases.	414 cases.	30 cases.	29 cases.	212 cases.	138 cases.	160 cases.
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
11.4	.....	.....	.....	0.2	0.1	.....	0.1	0.3	.....	0.2	.....	.....	0.5	0.7	1.2
25.2	.....	.....	.....	1.8	1.3	2.9	1.3	3.0	0.9	.....	3.3	.....	2.8	1.4	3.1
21.5	.....	.....	5.6	7.0	6.0	9.0	8.3	5.7	6.3	3.6	.....	13.7	7.5	3.6	9.4
10.9	.....	2.4	.....	12.6	11.0	12.8	11.8	9.6	11.7	15.5	10.0	17.2	19.3	13.0	20.0
8.9	8.3	4.8	.....	12.8	15.5	14.4	13.3	9.0	9.0	21.0	13.3	6.9	19.8	14.5	12.5
5.9	16.7	8.8	5.6	12.5	13.8	13.4	11.4	12.2	16.2	17.6	13.3	10.3	9.4	15.2	13.7
5.4	8.3	8.0	5.6	11.3	11.0	10.9	10.0	13.1	10.5	15.9	.....	3.4	9.0	9.4	8.1
2.2	16.7	14.4	.....	8.2	9.2	6.5	8.6	9.3	7.5	7.5	.....	3.4	5.7	12.3	8.7
1.7	16.7	8.8	11.1	7.2	6.2	5.9	7.7	6.0	7.8	5.1	3.3	3.4	5.2	5.1	3.7
1.2	16.7	10.4	38.9	4.8	5.5	4.6	5.6	5.1	4.8	3.4	6.7	6.9	2.4	5.1	3.7
1.7	.....	9.6	.....	4.1	3.5	2.9	4.4	4.5	4.8	2.4	3.3	13.7	3.8	4.3	3.1
1.5	16.7	8.0	.....	3.2	2.9	4.6	2.9	5.7	4.2	1.7	.....	.....	1.9	2.9	3.1
2.7	.....	13.6	22.2	.....	.....	.....	.....	.....	.....	.....	.....	3.4	1.4	1.4	3.1
1.2	.....	1.6	.....	12.3	12.0	10.9	12.7	14.3	12.6	4.8	16.7	10.3	4.7	4.3	2.5
1.0	.....	5.6	5.6	.....	.....	.....	.....	.....	.....	.....	10.0	.....	2.8	.....	1.2
1.2	.....	4.0	5.6	2.0	2.0	1.3	1.8	2.4	3.9	1.0	.....	3.4	.....	2.2	1.2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.7	3.4	3.8	3.6	1.2
99.6	100.1	100.0	100.2	100.0	100.0	100.1	99.9	100.2	100.2	99.9	99.9	99.4	100.0	99.7	99.5
6	63	73	74	59	60	55	59	64	63	50	48	49	35	43	35
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
11.4	.....	.....	.....	0.2	0.1	.....	0.1	0.3	.....	0.2	3.3	.....	3.3	2.1	4.3
36.6	.....	.....	.....	2.0	1.4	2.9	1.4	3.3	0.9	.....	3.3	13.7	10.8	5.7	13.7
38.1	.....	5.6	.....	9.0	7.4	11.9	9.7	9.0	7.2	4.0	13.3	30.9	30.1	18.7	33.7
39.0	.....	2.4	5.6	21.6	18.4	24.7	21.5	18.6	18.9	19.5	26.6	37.8	49.9	33.2	46.2
37.9	8.3	7.2	5.6	34.4	33.9	39.1	34.8	27.6	27.9	40.5	39.9	48.1	59.3	48.4	59.9
33.8	25.0	16.0	11.2	46.9	47.7	52.5	46.2	39.8	44.1	58.1	53.2	51.5	68.3	57.8	68.0
39.2	33.3	24.0	16.8	58.2	58.7	63.4	56.2	52.9	54.6	74.0	53.2	54.9	74.0	70.1	76.7
41.4	50.0	38.4	16.8	66.4	67.9	69.9	64.8	62.2	62.1	81.5	56.5	58.3	79.2	75.2	80.4
4.1	.....	24.8	33.4	14.3	14.0	12.2	14.5	16.7	16.5	5.8	33.4	17.1	11.3	10.8	6.1
4.6	16.7	32.8	33.4	17.5	16.9	16.8	17.4	22.4	20.7	7.5	33.4	20.5	12.7	12.2	9.2
6.3	16.7	42.4	33.4	21.6	20.4	19.7	21.8	26.9	25.5	9.9	33.4	20.5	14.6	15.1	12.3
6.5	33.4	52.8	72.3	26.4	25.9	24.3	27.4	32.0	30.3	13.3	36.7	34.2	18.4	19.4	15.4
8.2	50.1	61.6	83.4	33.6	32.1	30.2	35.1	38.0	38.1	18.4	43.4	41.1	20.8	24.5	19.1

Days are 1 day less than those given in the margin. For example, 1 to 14 days should read 1 to 13 days; 15 to 21 days should read 14 to 20

RANCE SYSTEMS AS TO PROMPTNESS IN CLAIM PAYMENTS AND PROCEDURE.

STATES HAVING COMPETITIVE STATE FUNDS.

Idaho.		Californi- a.	New York.			Pennsylvania. ¹									
Interval between date of accident and date of first payment.		Interval between date of accident and date of first payment.	Interval between date of accident and date of hearing.			Interval between date of accident and date of approval of agreement. ²								Interval between date of accident and date of first payment.	Interval between date of accident and date of first payment.
Private.	Self.	Fund.	Fund.	Private.	Self.	All-in- sur- ance car- riers.	All self-in- surers.	Fund.	First largest stock com- pany.	Second largest stock com- pany.	Third largest stock com- pany.	Largest mutual com- pany.	Fund.	Fund.	Fund.
446 cases.	190 cases.	404 cases.	12 cases.	125 cases.	18 cases.	4,093 cases.	3,587 cases.	478 cases.	840 cases.	335 cases.	334 cases.	414 cases.	30 cases.	29 cases.	
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
3.1	16.8	11.4				0.2	0.1		0.1	0.3		0.2	3.3		
12.3	21.1	25.2				1.8	1.3	2.9	1.3	3.0	0.9	.2			13.7
13.0	16.3	21.5			5.6	7.0	6.0	9.0	8.3	5.7	6.3	3.6	10.0		17.2
12.6	12.6	10.9		2.4		12.6	11.0	12.8	11.8	9.6	11.7	15.5	13.3		6.9
13.0	6.8	8.9	8.3	4.8		12.8	15.5	14.4	13.3	9.0	9.0	21.0	13.3		10.3
8.7	7.4	5.9	16.7	8.8	5.6	12.5	13.8	13.4	11.4	12.2	16.2	17.6	13.3		3.4
7.4	5.8	5.4	8.3	8.0	5.6	11.3	11.0	10.9	10.0	13.1	10.5	15.9			3.4
5.4	3.2	2.2	16.7	14.4		8.2	9.2	6.5	8.6	9.3	7.5	7.5	3.3		3.4
4.9	2.6	1.7	16.7	8.8	11.1	7.2	6.2	5.9	7.7	6.0	7.8	5.1	6.7		6.9
2.0	.5	.2	16.7	10.4	38.9	4.8	5.5	4.6	5.6	5.1	4.8	3.4	3.3		13.7
1.8	.5	1.7		9.6		4.1	3.5	2.9	4.4	4.5	4.8	2.4			
3.1	.5	.5	16.7	8.0		3.2	2.9	4.6	2.9	5.7	4.2	1.7			3.4
5.4	2.6	2.7		13.6	22.2								16.7		10.3
3.4	2.1	.2		1.6		12.3	12.0	10.9	12.7	14.3	12.6	4.8	10.0		
1.8	.5	1.0		5.6	5.6										3.4
2.0	.5	.2		4.0	5.6	2.0	2.0	1.3	1.8	2.4	3.9	1.0	6.7		3.4
99.9	99.8	99.6	100.1	100.0	100.2	100.0	100.0	100.1	99.9	100.2	100.2	99.9	99.9	99.4	
41	26	26	63	73	74	59	60	55	59	64	63	50	48	49	
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
3.1	16.8	11.4				0.2	0.1		0.1	0.3		0.2	3.3		
15.4	37.9	36.6				2.0	1.4	2.9	1.4	3.3	0.9	.4	3.3		13.7
28.4	54.2	58.1			5.6	9.0	7.4	11.9	9.7	9.0	7.2	4.0	13.3		30.9
41.0	66.8	69.0		2.4	5.6	21.6	18.4	24.7	21.5	18.6	18.9	19.5	26.6		37.8
54.0	73.6	77.9	8.3	7.2	5.6	34.4	33.9	39.1	34.8	27.6	27.9	40.5	39.9		48.1
62.7	81.0	83.8	25.0	16.0	11.2	46.9	47.7	52.5	46.2	39.8	44.1	58.1	53.2		51.5
70.1	86.8	89.2	33.3	24.0	16.8	58.2	58.7	63.4	56.2	52.9	54.6	74.0	53.2		54.9
75.5	90.0	91.4	50.0	38.4	16.8	66.4	67.9	69.9	64.8	62.2	62.1	81.5	56.5		58.3
12.6	5.7	4.1		24.8	33.4	14.3	14.0	12.2	14.5	16.7	16.5	5.8	33.4		17.1
15.7	6.2	4.6	16.7	32.8	33.4	17.5	16.9	16.8	17.4	22.4	20.7	7.5	33.4		20.5
17.5	6.7	6.3	16.7	42.4	33.4	21.6	20.4	19.7	21.8	26.9	25.5	9.9	33.4		20.5
19.5	7.2	6.5	33.4	52.8	72.3	26.4	25.9	24.3	27.4	32.0	30.3	13.3	36.7		34.2
24.4	9.8	8.2	50.1	61.6	83.4	33.6	32.1	30.2	35.1	38.0	38.1	18.4	43.4		41.1

¹ The periods are 1 day less than those given in the margin. For example, 1 to 14 days should read 1 to 13 days; 15 to 21

								PRIVATE INSURANCE STATES.			
Michigan.								Massachu- setts.	Indiana.	Illinois. ¹	
Interval between date of acci- dent and date agreement recei- ved. ¹				Interval between date of accident and recei- pt of first pay- ment. ¹				Interval between date of accident and date agree- ment re- ceived.	Interval between date of accident and date receipt made out.	Interval between date of accident and date of first payment.	Period (in days).
Fund.	Stock.	Mutual.	Self.	Fund.	Stock.	Self.					
29 cases.	212 cases.	138 cases.	160 cases.	16 cases.	187 cases.	153 cases.		186 cases.	90 cases.		
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.		
.....	0.5	0.7	1.2	.....	0.5	0.7	.....	0.5	1.1	.....	1 to 7.
.....	2.8	1.4	3.1	.....	3.2	3.3	.....	2.7	4.4	.....	8 to 14.
.....	13.7	7.5	3.6	.....	12.3	7.8	.....	17.7	25.6	.....	15 to 21.
.....	17.2	19.3	13.0	.....	24.6	18.3	.....	27.4	12.2	.....	22 to 28.
.....	6.9	19.8	14.5	.....	16.6	19.6	.....	23.1	6.7	.....	29 to 35.
.....	10.3	9.4	15.2	.....	13.9	6.5	.....	5.9	6.7	.....	36 to 42.
.....	3.4	9.0	9.4	.....	12.5	7.5	.....	4.8	10.0	.....	43 to 49.
.....	3.4	5.7	12.3	.....	18.7	4.8	.....	6.5	7.8	.....	50 to 56.
.....	3.4	5.2	5.1	.....	.....	1.6	.....	2.2	4.4	.....	57 to 63.
.....	6.9	2.4	5.1	.....	.....	5.9	.....	2.2	4.4	.....	64 to 70.
.....	13.7	3.8	4.3	.....	6.2	2.1	.....	.5	3.3	.....	71 to 77.
.....	.....	1.9	2.9	.....	3.1	6.2	.....	.5	2.2	.....	78 to 84.
.....	3.4	1.4	1.4	.....	3.1	.....	.....	.5	2.2	.....	85 to 91.
.....	10.3	4.7	4.3	.....	2.5	2.1	.....	2.7	3.3	.....	92 to 121.
.....	.....	2.8	.7	.....	1.2	12.5	.....	.5	.....	.....	122 to 151.
.....	3.4	.....	2.2	.....	1.2	12.5	.....	1.1	2.2	.....	152 to 182.
.....	3.4	3.8	3.6	.....	1.2	.....	.....	1.1	3.3	.....	183 and over.
9	99.4	100.0	99.7	99.5	99.8	100.4	100.1	99.9	99.8	.....	Total.
49	35	43	35	84	34	34		29	35	(Stock, ⁴ 44 Mutual, ⁴ 51 Self, ⁴ 54 Reciprocals, ⁴ 52)	Med ian (in days).
Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.		Claims paid or set- tlements made within—
.....	3.3	2.1	4.3	.....	3.7	4.0	.....	3.2	5.5	.....	2 weeks.
.....	13.7	10.8	5.7	.....	16.0	11.8	.....	20.9	31.1	.....	3 weeks.
.....	30.9	30.1	18.7	.....	40.6	30.1	.....	48.3	43.3	.....	4 weeks.
.....	37.8	49.9	33.2	.....	57.2	49.7	.....	71.4	50.0	.....	5 weeks.
.....	48.1	59.3	48.4	.....	6.2	71.1	.....	56.2	56.7	.....	6 weeks.
.....	51.5	68.3	57.8	.....	18.7	78.6	.....	67.3	66.7	.....	7 weeks.
.....	54.9	74.0	70.1	.....	37.4	83.4	.....	77.1	74.5	.....	8 weeks.
.....	58.3	79.2	75.2	.....	37.4	85.0	.....	81.7	78.9	.....	9 weeks.
.....	17.1	11.3	10.8	.....	50.0	5.8	.....	7.2	5.4	.....	Claims unpaid or set- tlements not made at end of—
.....	20.5	12.7	12.2	.....	50.0	6.9	.....	8.5	5.9	.....	13 weeks.
.....	20.5	14.6	15.1	.....	56.2	7.4	.....	11.8	6.4	.....	12 weeks.
.....	34.2	18.4	19.4	.....	62.4	9.5	.....	15.1	6.9	.....	11 weeks.
.....	41.1	20.8	24.5	.....	62.4	15.4	.....	18.4	9.1	.....	10 weeks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9 weeks.

days; 15 to 21 days should read 14 to 20 days, etc.

⁴ Arithmetic average.

COMPARISON OF THE INVESTMENT RECORDS OF THE

STATES HAVING EXCLUSIVE STATE FUNDS									
State	Investment	Interest	Dividend	Profit	Loss	Net	Balance	Assets	Liabilities
Alabama	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Alaska	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Arizona	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Arkansas	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
California	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Colorado	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Connecticut	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Delaware	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Florida	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Georgia	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Hawaii	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Idaho	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Illinois	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Indiana	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Iowa	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Kansas	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Kentucky	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Louisiana	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Maine	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Maryland	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Massachusetts	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Michigan	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Minnesota	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Mississippi	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Missouri	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Montana	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Nebraska	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Nevada	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
New Hampshire	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
New Jersey	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
New Mexico	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
New York	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
North Carolina	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
North Dakota	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Ohio	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Oklahoma	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Oregon	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Pennsylvania	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Rhode Island	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
South Carolina	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
South Dakota	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Tennessee	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Texas	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Utah	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Vermont	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Virginia	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Washington	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
West Virginia	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Wisconsin	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0
Wyoming	100.0	1.0	1.0	1.0	1.0	1.0	100.0	100.0	100.0

Workmen's Compensation Fund of North Dakota.

THE State of North Dakota is one of the later States to provide for its workers the benefits of a compensation law, the statute on the subject having been enacted in March, 1919. The law established an exclusive State fund as the method of providing insurance for employers and employees, business beginning with July 1, 1919. A workmen's compensation bureau was established for the administration of the law generally, and this bureau requested Mr. Emile E. Watson, consulting actuary, and for a number of years chief actuary and statistician for the Industrial Commission of Ohio, to make an investigation of the condition of their fund. The results of this investigation are published in a pamphlet of 15 pages.¹

Mr. Watson classes the North Dakota law as giving "much larger compensation benefits than is provided by the most liberal of the remaining workmen's compensation acts now in operation in the other 41 States of the Union." Compared with the neighboring States, the total benefits provided by the North Dakota law are more than twice as great as those provided by Montana, approximately 65 per cent higher than those provided by the South Dakota law, and about 45 per cent in advance of those provided by the Minnesota statute.

The analysis covers the operations of the fund for eight months, from July 1, 1919, to March 1, 1920. During that time the bureau collected in premiums \$490,492.84 and in interest \$3,558.63, or a total of \$496,051.47. Claim payments were made amounting to \$21,736.15, the disbursements for administrative expense were \$32,515.10, refunds and returned checks bringing the total disbursements up to \$55,884.20. This shows an excess of income over disbursements of \$440,167.27, which sum stands as assets, mainly in the hands of the State treasurer, for the bureau. Against this are liabilities in the form of claim reserves amounting to \$128,120.08, administrative expense \$2,541.97, and unearned premium in the sum of \$217,613.37. A statutory surplus fund of \$49,445.25 and a general surplus of \$42,446.60 balance the assets.

In commenting on these figures Mr. Watson points out that the fund is "in a thoroughly sound and solvent condition." The statutory surplus conforms to the provision of law to guarantee the perpetual solvency of the fund, while the general surplus is earned premium such as a private stock company would use to pay dividends to its stockholders.

The following statement gives the detailed expenses of administration from the organization of the bureau, July 1, 1919, up to March 1, 1920:

Salaries.....	\$23, 206. 68
Postage.....	608. 72
Supplies.....	2, 517. 15
Furniture and fixtures.....	3, 964. 41
Printing.....	2, 328. 05
Miscellaneous.....	588. 56
Traveling.....	703. 81
Telephone and telegraph.....	139. 69
Rent.....	1, 000. 00
Total.....	² 35, 057. 07

¹ The North Dakota workmen's compensation act considered from the viewpoint of the North Dakota workmen, by Emile E. Watson, actuary, 1920.

² Including \$2,541.97 unpaid at time of statement.

The total administrative expenses of \$35,057.07 were only 12.6 per cent of the total earned premium, which for the 8 months amounted to \$278,438.10, including interest earnings of \$5,558.63. It should be noted that in the administrative expenses just shown are included the important items of cost of organizing the fund and amount expended for office furnishings and equipment—items which might appropriately be distributed over future years. With these items included, the low expense ratio of only 12.6 per cent may be contrasted with the 40 per cent expense ratio normally recognized as necessary in a case of stock casualty insurance companies. "The expense ratio of an insurance company during its first year of operation generally exceeds 100 per cent." In commenting on the purpose of the fund to furnish insurance at absolute cost, and the bare cost of administration and maintenance of necessary surplus, the conclusion is reached that "there is not a workmen's compensation insurance carrier in this country that has surpassed the record made by the North Dakota Workmen's Compensation Bureau in point of economy of administration."

The development of such strong solvency raises the question as to unnecessarily high premium rates. The actuary concludes that, in view of the necessity of firmly establishing the fund on a safe basis, the rates have not been too high, and as compared with stock insurance, "the fund is already saving the North Dakota employers in excess of 30 per cent of the workmen's compensation insurance premium they would have paid the stock casualty insurance companies for this same insurance." However, in view of the intention of the law to avoid unnecessary surpluses and to distribute equitably the burden of compensation, the premium rates were being revised as of July 1, 1920, and the report states that in general the revision would be downward, though a few classifications which have produced adverse experiences would require increases.

Two recommendations are made by Mr. Watson: One to facilitate the making of awards, and the other to take stronger measures against delinquent contributors to the fund. The ultimate conclusion, however, is that this new law is in the van both in liberality and in economy of administration, being of the "greatest financial benefit" to every merchant, doctor, butcher, grocer, and clothier in the State of North Dakota, as well as to the workmen who may be injured in the course of their employment.

Extraterritoriality of California Compensation Law.

AVEXED question in many jurisdictions, and especially so in California, has been the power of the compensation commission to grant awards to workmen injured outside the boundaries of the State. The law of this State was compulsory, and the industrial commission originally took the position that though the law in itself was not operative beyond State boundaries, a contract made within the State followed the employee wherever he went in its discharge. An award was therefore given in favor of a man employed in the Alaskan fisheries by a California company.

This decision was contested, but the Supreme Court sustained the ruling of the commission on its first consideration. (*Anderson v. North Alaska Salmon Co.*, Mar. 31, 1916.) A rehearing was granted, however, and in December of the same year the view was taken that inasmuch as the law was compulsory the employer and employee had in no true sense contracted in regard to the matter, so that there was no obligation to pay compensation in such a case. (*North Alaska Salmon Co. v. Pillsbury*, 174 Calif. 1, 162 Pac. 93.)

The act was subsequently amended, expressly providing that residents of California, citizens or aliens, contracting within the State, should be subject to the law regardless of the place of injury (sec. 58, ch. 586, acts of 1917). This provision was attacked as discriminatory, giving to residents of the State (meaning thereby one domiciled therein), a right not granted the citizens of other States who might have entered into a contract within the State and suffered injury under identical circumstances. As this was in direct conflict with the provision of the United States Constitution which declares that "the citizens of each State shall be entitled to all the privileges and immunities of citizens in the several States," the provision was held unconstitutional. Therefore, the award made to an alien domiciled in the State at the time of his injury and contracting therein, but receiving his injury at a time of absence from the State in the discharge of his contract, was reversed. (*Quong Ham Wah Co. v. Industrial Accident Commission*, 59 Calif. Dec. 18, Dec. 26, 1919).

A rehearing was granted in this case also, and on a fuller argument and the presentation of a point not made in the original briefs, the court reversed its former position, and affirmed the award; for although the right to compensation can not be classed merely as a contractual liability, the legislature had the right to prescribe a liability to attach in case of employment contracts made within the State. "The contract creates a relationship under the sanction of the law, and the same law attaches as an incident thereto an obligation to compensate for injuries sustained abroad amounting to a sort of compulsory insurance. * * * No principle of law is defeated by attaching to such contracts the same duties and rights as incidents to acts abroad that are lawfully imposed as incidents to the same acts occurring within the geographical limits of the State." (Same case, 192 Pac. 1021.)

The question remained of meeting the objection as to discriminatory legislation between residents of the State and citizens of other States entering into contracts and rendering service under similar conditions. It was decided at this time that it was the intention of the legislature to give to citizens of the State the benefit of the law regardless of the place of injury, and the failure specifically to include in this benefit citizens of other States would not be construed as a positive attempt to exclude them; but the provision of the Federal Constitution should be construed as having the effect of granting to such nonresident citizens identical rights and privileges with those provided by law for residents of California. This provision of the law was therefore sustained as constitutional, and the award made was confirmed.

An appeal has been taken to the Supreme Court of the United States.

Lump-Sum Settlement Not in Conformity to Nebraska Statute.

THE Supreme Court of Nebraska recently rendered a most important decision in behalf of the compensation law of the State. June 20, 1918, John E. Perry was injured while employed by the W. L. Huffman Automobile Co., and was awarded compensation, payments being made for 12 weeks. The insurance company denied further liability, and a petition was filed for a hearing before the compensation commissioner. Before the date set for this hearing Perry's attorney and the insurance company's adjuster agreed to settle the case for \$500. Perry accepted the settlement, but the compensation department refused to approve it and asked the judge who had approved settlement to set it aside to permit the commissioner to determine disability as provided by law. Four lawyers, including the injured man's attorney, were at the hearing seeking to prevent the judge from setting aside the alleged settlement, in which they were successful.

The compensation commissioner persisted in his efforts to secure a reversal of this position, but the district court refused to reconsider the case and an appeal was taken to the Supreme Court. At the first hearing the Supreme Court decided against the department and in favor of the agreement as made. (*Perry v. W. L. Huffman Automobile Co.*, 175 N. W. 1021.) A motion was made for a rehearing and was granted, the Supreme Court reversing its position and remanding the case for further proceedings in accordance with its opinion. It was first laid down that in entering into an agreement under the compensation law the employer and employee were no longer at liberty to make settlements at variance with the statutory terms, and that the ascertainment of the amounts of compensation payable periodically under the law is a prerequisite to a contract for commutation. It was added that the matter of commuting periodical payments to a lump sum was one in which the public has an interest which it is the duty of the court to protect without regard to the wishes of the parties. The purpose of periodical payments is to protect both the employee and the public, and payments in lump sums are departures from the general rule, and should only be sanctioned in accordance with the specific provisions of the law applicable thereto. In the case in hand facts were not before the court when the case was approved, and it had not been presented to or approved by the compensation commissioner. In short, the specific provisions of the law governing the entire procedure, as well as its spirit and intent, had been disregarded in the settlement made, and an error had been committed in overruling the motion to vacate the judgment approving the settlement. It followed that the question must be submitted to the compensation commissioner for a fresh adjudication of the entire subject, his rights and powers being fully vindicated. (179 N. W. 501.)

Rates of Pensions for Mothers in Ontario.

IN THE May, 1920, issue of the MONTHLY LABOR REVIEW (pp. 170-171) a summary was given of a report issued by the Department of Labor of Ontario setting forth the results of an investigation into the problems which would be incident to the inauguration of a proposed scheme of mothers' allowances in that Province. A law providing for mothers' allowances has since been enacted and a board to administer the law has been appointed. This board, according to an announcement in the Canadian Labor Gazette for October (p. 1262), has decided to establish local committees or boards in each city, town, county, and judicial district—about 89 in all—in the Province, to receive applications for pensions and pass on them. Each board will have five members. The following temporary flat rates of allowances have been adopted by the board:

City: Widow with five or more children, \$55 per month; with four children, \$50 per month; with three children, \$45 per month; and with two children, \$40 per month. County: Widow with five or more children, \$45 per month; with four children, \$40 per month; with three children, \$35 per month; with two children, \$30 per month.

Payments are to be retroactive to October 1, 1920.

Social Insurance in Portugal.¹

THREE decrees were issued in May, 1919, providing compulsory insurance in Portugal for sickness, industrial accidents, invalidity, old age, and for dependents of all persons industrially employed and receiving wages below the sums fixed for each class of insurance.

Sickness insurance, provided through the "Institute of obligatory social insurance and general welfare," is compulsory for all persons between the ages of 15 and 70 not earning more than 900 escudos (\$972.45, par) a year, while employers, civil and military authorities, and others receiving more than this sum are divided into four classes according to their incomes, and are required to contribute from 0.5 escudo (54 cents, par) to 3 escudos (\$3.24 par) per month to the fund. When the income of such a person falls below this fixed sum, he is changed from a contributing member to one who is eligible for benefits.

Active members are divided into three classes and are required to pay from 0.3 escudo (32.4 cents, par) to 0.5 escudo (54 cents, par) per month, and they may receive benefits for as much as 275 days. The payments are divided into four periods paying 0.3 escudo (32.4 cents, par), 0.24 escudo (25.9 cents, par), and 0.16 escudo (17.3 cents, par), respectively, for each of the three classes for the first 30 days and about one-third of these amounts for the last period of 185 days. Municipal physicians are required to attend members at a fixed rate of remuneration.

The associations formed under this law have all civil rights. They may sue or be sued, may acquire property, etc., and may upon ap-

¹Boletim da Previdência Social. May to December, 1919. Lisbon.

proval of the Government form auxiliary unions, savings funds, and establish sanatoriums and furnish medical aid, and where these funds will permit, may establish day nurseries, milk depots, school lunch rooms, etc., for the benefit of their members.

Sick benefits are paid after six months' membership, and death and dependents' benefits after two years. Schedules of premiums may be revised every two years.

Accident insurance is paid to both brain and hand workers, the employer being responsible for insurance of all in his employ and the State for employees in the civil service. The insurance includes hospital and medical attention and compensation for incapacity or death incurred as a result of employment. In case of death, compensation is paid to the husband or wife surviving and to minor children. Total permanent disability carries a pension equal to two-thirds of the former earnings, and permanent partial disability one-half of the wages, while the same proportions are maintained for total and partial temporary disability.

Insurance for invalidity (defined as total disability resulting from natural causes) and insurance for old age and for dependents are also compulsory for all persons from 15 to 65 years of age except State and municipal officials (for whom the law provides superannuation benefits) and some others in special classes. Invalidity and old-age pensions are entirely supported by the State, though the Provinces may be required to contribute toward their support. Old-age pensions are granted at the age of 70 if premiums, which are fixed at the rate of one-half of 1 per cent of wages, have been paid for 30 years, while premiums payable for dependents are fixed at 1 per cent of wages, payable in 47 installments per year.

Unemployment Relief in Denmark.¹

THE support of unemployment in Denmark is based upon the laws of April 4, 1914, and of December 17, 1919.

Insurance against unemployment is carried out on the principle of helping those who help themselves. The Danish Treasury gives a yearly grant corresponding to one-half of the total membership subscription paid by active members, and the communes can make a contribution to the bureaus for active members resident in the commune, but this contribution shall not exceed one-third of the members' contributions. In regard to the support of unemployment, the main rule is that there must not be given in relief more than two-thirds of the average amount obtained by the laborer from his work. The support must in no case be less than 1 krone [26.8 cents, par] a day, and must not exceed 2 kroner [53.6 cents, par] a day with a supplement of 2 kroner a day to heads of families, and of 1 krone 50 øre [40.2 cents, par] a day to members who are not heads of families. As, however, under the special conditions which arose as a result of the war, temporary measures had been passed regarding special support for unemployed, the law of December 17, 1919, which superseded

¹ Taken from Report on the post-war economic and industrial situation of Denmark, issued by the British Department of Overseas Trade, London, 1920, p. 32.

these laws regarding extraordinary support, contains certain temporary regulations which are to be operative from January 1, 1920, until March 31 in the same year. The whole law of December 17 is to be revised in the parliamentary sessions, 1921-22. According to these temporary regulations, aid can continue to be given after the support from the unemployment bureau has ceased. In addition the rates of relief have been increased. Further, help toward rent can be given to members who are heads of families when they have been employed for 30 days in the course of the last 60 days. This help toward rent must not exceed 30 kroner [\$8.04, par] a month.

In order to obtain support from an unemployment bureau, it is necessary that a person should have been a member of the bureau for a period of 12 months immediately preceding the date on which support is given. This law includes a series of regulations regarding the various circumstances in which support may not be given by a recognized unemployment bureau. In compiling these rules the main principle has been that only that unemployment which is due to lack of work is to be supported. Support must accordingly not be given to persons who take part in strikes or lockouts, nor to persons who are ill.

LABOR LAWS.

The Eight-Hour Law in Argentina.

THE text of the eight-hour law of the Province of Cordoba, as recently amended, is contained in a recent Argentine publication.¹ This law covers workmen in manufactories, workshops, mines, and building trades, clerks, railway conductors and guards, and employees of the Province and of contractors engaged in work for the Province. Employees in bakeries and pastry and confectioners' shops are exempted. The law also regulates the closing hour for mercantile establishments of various sorts and provides penalties for noncompliance and other measures for its enforcement and administration.

Peruvian Immigration Law of October 10, 1919.²

ON OCTOBER 10, 1919, the Peruvian Government issued a decree regulating the admission and identification of immigrants and making provisions for the promotion of immigration. The text of the decree is the following:

ARTICLE 1. The Nation obligates itself to pay third-class passage for every white immigrant not a Gipsy and for three members of his family, provided he is admitted and can furnish proof of being a moral person.

ART. 2. The Nation guarantees to pay the costs of sustenance and lodging of the immigrant and his family for a period of six days beginning with the day of his landing as well as the costs of transportation to the locality in which he is going to reside.

ART. 3. The personal effects and furniture, tools for personal use, agricultural implements, and utensils for the exercise of the profession or trade of the immigrant and of his family shall be exempt from all custom duties.

ART. 4. A commission of officials composed of representatives of the political authorities and of the public health service of Callao shall either directly or through its subordinate offices, but always under its own responsibility, examine the immigrants and their families, as well as persons landing in transit. For the present the landing of immigrants shall be permissible in Callao only.

ART. 5. The admission of immigrants and travelers in transit shall be conditioned on their identification by means of a passport bearing their photograph, their submission of documents showing their good character, the declaration of intention of settlement within the national territory for the purpose of exercising a profession, trade, or other useful occupation, or a declaration of the reasons for their journey and landing; submission of a health certificate and the taking of finger prints.

ART. 6. The Department of Industry and Commerce is charged with the carrying out of the present decree and shall report all difficulties experienced in its enforcement.

The costs of enforcing the present decree shall be charged to extraordinary expenditures of the department.

¹ *Cronica Mensual del Departamento Nacional del Trabajo*. Buenos Aires, Agosto de 1920. Pp. 512-516.

² Translated from *Bollettino della Emigrazione*. Rome, July, 1920. Vol. XIX, No. 7, p. 297.

Formal Contract for Protection of Domestic Servants Leaving Salvador.¹

A DECREE dated August 23, 1920, issued by the National Legislative Assembly of the Republic of Salvador, requires that domestic servants departing from the country alone or accompanying their employers shall exhibit a formal contract issued by the Ministry of Foreign Affairs under which the employer binds himself to provide for the return of the servant to the country at the termination of the time of the contract or when both agree to cancel the same. The purpose is to prevent the employer abandoning the servant when away from home in a foreign land without making provision for his return to his native land. The text of the decree is as follows:

The National Legislative Assembly of the Republic of el Salvador:

Whereas: There are many Salvadorians of the working class, who as domestic servants leave Salvadorian territory accompanying their respective masters or employers;

Whereas: Many times it happens that, at the end of the voyage, the masters or employers, for one or another reason, abandon or discharge the servant, without taking note of the difficult conditions in which the said servant is then placed, without funds, far from his country and his family;

Whereas: It is the duty of the State to attend to the necessities of its nationals within its sphere of governmental action with the object of protecting them from possible eventualities and accidents; and

Whereas: The emigrants of this class become charges of the public treasury and the Government is constantly obliged to aid in their return to the country to the detriment of public funds;

In use of its constitutional faculties and upon the initiative of the executive power, decrees:

ARTICLE 1. All Salvadorians who do not travel for their own account and who travel as domestic servants by themselves or in company with their masters or employers, will have to exhibit, duly legalized in the Ministry of Foreign Affairs their respective contracts, in order to obtain their corresponding passport.

ART. 2. The said contract shall duly stipulate on the part of the master, chief, or employer his obligation to return to this country the contracted servant at the termination of the time of the contract or when both agree to cancel the same.

ART. 3. No charge for passage, maintenance, or illness shall be deducted from the salary of the servant.

ART. 4. The contract shall not exceed one year and may be renewed voluntarily, giving notice in each case to the Salvadorian consul in the place where it is verified for his knowledge and action.

ART. 5. In the respective passport, it shall be shown that the holder travels in the capacity of a domestic servant, indicating the person by whom he is employed.

ART. 6. The contract shall be visaed in the Ministry of Foreign Affairs for legality.

ART. 7. For the visaing of each contract of this class, there shall be collected, one colon [\$0.50 U. S.] in internal-revenue stamps, which will be canceled with the seal of the Ministry of Foreign Affairs.

ART. 8. The Salvadorian who travels in the capacity of servant shall carry with him, together with his papers of personal identity, the visaed contract.

ART. 9. All Salvadorian diplomatic and consular representatives are under the obligation to look after the interests of their fellow citizens exhibiting said contract, visaed by the Ministry of Foreign Affairs.

¹ Data supplied by American chargé d'affaires at Salvador in communication to the Department of State dated August 25, 1920.

LABOR ORGANIZATIONS.

Publications of the International Labor Office.

PLANs for promoting the statistical and research work of the International Labor Office have recently been outlined by Dr. Royal Meeker, formerly Commissioner of the United States Bureau of Labor Statistics, who went to Geneva to assume charge of the scientific division of the International Labor Office. A letter from Dr. Meeker, dated September 24, states that it is planned to publish regular bulletins and special studies, the initial numbers of some of which have already made their appearance.

The Monthly International Labor Review will contain special articles and notices upon all subjects relating to labor and industry. The first issue of this publication is in course of preparation.

The Bulletin, the first issue of which appeared on September 8, is being published weekly and contains the official acts of the International Labor Organization and the International Labor Office.

The legislative series contains translations of laws affecting labor enacted in the different countries of the world. Several numbers of this publication have already been issued.

Special studies or reports will be issued from time to time giving the results of rather elaborate and detailed investigations or researches. One of these, entitled "Labor conditions in Soviet Russia," is now available.

Bibliographies of publications relating to labor and industry are contemplated. These probably will not appear separately, but will be included in the Monthly International Labor Review.

A series of pamphlets under the title Studies and reports (*Etudes et documents*) has also been started. These contain reports and articles on subjects of immediate importance in the field of labor and industry, and are classified in 14 series, as follows:

(a) Industrial relations (the activities of trade-unions and employers' associations; and political activity in its relation to question of labor); (b) Economic relations; (c) Employment and unemployment; (d) Conditions of labor; (e) Social insurance; (e, 2) Disabled soldiers and the victims of the war; (f) Industrial accidents; (f, 2) Industrial hygiene; (g) Conditions of life; (h) Cooperation; (i) Protection of women and the race; (j) Education; (k) Agriculture; (l) Maritime affairs.

Thirty-sixth Annual Convention of the Trades and Labor Congress of Canada.¹

THE thirty-sixth annual convention of the Trades and Labor Congress of Canada was held at Windsor, Ontario, September 13-18, 1920, and was attended by 524 delegates. The secretary-treasurer reported a membership of 173,463, an increase of 12,858 during the year, and stated that six trades and labor councils and

¹ Data taken from the Canadian Labor Gazette for October, 1920, pp. 1331-1351.

six federal labor unions had been chartered. Some of the resolutions adopted deal with the following subjects:

In favor of the double-platoon system for firemen, 12 hours per day and 72 in the week, no firemen being required to work more than 12 consecutive hours.

In favor of assisting the Canadian National Railway employees in securing an increase in the minimum pension allowance from \$20 to \$50 per month.

In favor of all the Provinces adopting exclusive State insurance to be administered by a board on which labor shall be represented.

In favor of legislation nullifying contracts between employer and employees which conflict with the right of collective bargaining.

Against the issuing of licenses to detective agencies which engage in strike-breaking activities.

In favor of the proper inspection of scaffolds by a qualified inspector.

In favor of every worker being insured at least one day's rest in seven.

In favor of the Dominion Government inserting provision for the payment of fair wages in all orders for supplies and equipment.

In favor of legislation similar to that in the British trades disputes act re injunctions and seizures of trade-union funds.

In favor of fair wage clauses in all provincial government contracts.

In favor of laws to govern the manning of vessels and changes in conditions governing pilotage.

In favor of 28 days constituting a month in the matter of pay for seamen and that seamen should be 12 months at sea before being qualified as able seamen.

In favor of the organized railroad employees being given representation on the board of management of Government railways by the appointment of a bona fide trade-unionist.

The officers for the ensuing year are:

President: Tom Moore, organizer, United Brotherhood of Carpenters and Joiners, Ottawa, Ontario.

Vice presidents: Arthur Martel, member of executive board, United Brotherhood of Carpenters and Joiners, Montreal, Quebec; H. J. Halford, fourth vice president, Journeymen Barbers' International Union, Hamilton, Ontario; Alexander McAndrew, member of the United Brotherhood of Maintenance-of-Way Employees and Railway Shop Laborers, Moosejaw, Saskatchewan.

Secretary-treasurer: P. M. Draper, member International Typographical Union, Ottawa, Ontario.

The next convention will be held at Winnipeg in 1921.

International Congress of Farm Workers at Amsterdam in August, 1920.¹

IT IS estimated that a total of 2,100,000 farm workers were represented at the first International Congress of Farm Workers which was held at Amsterdam August 17-20, 1920, delegates being present from Austria, Belgium, Denmark, Germany, Italy, Netherlands, Sweden, and the United Kingdom. Of the total land workers represented, it is estimated that 51,000 were Austrian, 1,700 Belgian, 30,000 Danish, 780,000 German, 845,000 Italian, 15,000 Dutch, 20,000 Swedish, and 360,000 British. The report states that "although the numbers of some of the continental unions exceeded the British total the proportion of the agricultural workers represented varied considerably; thus, it was estimated that only 10 per cent of the Italian and 30 per cent of the German workers are in their respective unions,

¹ Data taken from Wages Board Gazette, London, Oct. 1, 1920, p. 461.

while about 50 per cent of the agricultural laborers of Great Britain are enrolled in one or other of the unions."

Mr. P. Hiemstra, secretary of the Dutch Farm Workers' Union (*Hollandsche Landarbeidersbond*), presided and was subsequently elected the first secretary of the organization. In an address Mr. Hiemstra emphasized the importance of an international federation of agricultural workers and expressed the opinion that there would be some difficulty in securing the guarantee of the "right of combination for agricultural workers," which is one of the questions to be discussed at the third International Labor Conference to be held at Geneva in April, 1921.¹ He added that in his opinion an attempt would be made at Geneva to impose special conditions on agricultural labor, and urged the delegates to come to an agreement on the most important subjects of the agenda. He advocated a discussion on the socialization of agriculture. Draft rules for the federation were adopted and an executive committee was appointed consisting of W. R. Smith, M. P., representing Great Britain; Herr D. Lewinson, representing Scandinavia; Signora Altobelli, representing Italy; Mr. P. Hiemstra, representing the Netherlands; and Herr G. Schmidt, representing Germany. Mr. Smith was chosen the first president. Resolutions were passed against war and in favor of land nationalization, but the report states that when the Dutch delegates proposed a number of resolutions dealing with hours of labor, protection of women and children, social insurance, technical agricultural education, sanitation and hygienic conditions, and the right to join unions, the congress, while expressing its general approval of the principles expressed in the resolution, decided to put off discussion until the Geneva conference.

Activities of Pottery Workers in England.

THE eleventh annual meeting of the National Pottery Workers' Society (Great Britain) was held at Newcastle on September 18. The secretary's report² noted a membership of 45,000, or a gain of 10,000 during the year, and recommended that the contributions by members be increased inasmuch as the society's liabilities have grown to a much greater extent than its receipts. Attention was called to the fact that the continuous rise in the cost of living has made it necessary to make repeated applications for advances in wages, and that the society has been successful in obtaining increases in wages in every branch of the industry—general earthenware, sanitary earthenware and fireclay, china, tile, electrical and rock and jet trades, and English and Scottish stoneware trades.³ Continuing, the report states in this connection:

Particular reference must be made to the low-paid workers prior to the war, such as warehouse and dipping-house women and general laborers. In the latter case they were paid from 18s. [\$4.38, par] to 24s. [\$5.84, par], and at the present the base rate has been increased to 30s. [\$7.30, par], plus 100 per cent. Warehouse and dipping-house women and girls, who were paid extremely low wages, ranging from commencing

¹ For statement of the agenda of this conference see MONTHLY LABOR REVIEW for November, p. 210.

² Data taken from Staffordshire (England) Sentinel for Sept. 16, 1920.

³ For a statement of wages paid in the pottery trades, see MONTHLY LABOR REVIEW for August, pp. 86-88, and pp. 82 and 83 of this issue.

wage of 2s. 6d. [60.8 cents, par] up to 12s. [\$2.92, par] at 21 years, are now paid the minimum scale of wages, commencing at 14s. [\$3.41, par] up to 36s. [\$8.76, par] at 21 years. At the same time it should be pointed out that the above wages are not at all satisfactory, and at the opportune time steps will be taken to higher the minimum scales.

"Potters' Asthma."

THE secretary reported also that an effort has been made to induce the Home Office to schedule silicosis, better known as "potters' asthma," as an occupational disease under the compensation act. While not consenting definitely to the request the Home Office agreed to a conference on the subject, where representatives of both employers and operatives met to discuss the question. However, at the time of the report no action had been taken by the Government.

The national council of the pottery industry, according to the secretary's report, has dealt with many matters of importance to the trade. Not included in his report, but interesting in this connection, is a statement contained in the Staffordshire (England) Sentinel for September 15 briefly summarizing two reports issued by the national council of the pottery industry, dealing with appropriate education for juvenile pottery workers. The first report concerns itself with the education of children up to 16 years of age, recommending that the work in the day continuation schools should be nonvocational "though in suitable ways (without any trade teaching) illustrations of the application of general principles to processes of industry should be given, and references made to the materials employed." Classes should be limited to 30 pupils or to 20 in practical subjects, while even a smaller number is preferable. The report suggests that there are at least 15,000 children associated with the manufacturing side of the earthenware, china, and porcelain industries and a definite curriculum of nonvocational type for such children is thought advisable.

The second report completes the survey of suitable education for young persons up to 18 years, and recommends that part-time education should be supplemented by provision for voluntary education of a reasonable vocational type in the evening, with commercial, industrial, and industrial art courses.

Growth of Trade-Unionism in Great Britain.

THE following table exhibits the total number of members in British trade-unions affiliated to the Trades-Union Congress in 1914 and 1920, by groups of trades, showing the per cent of growth, as collected and published by the British Trade-Union Review for August, 1920, issued by the parliamentary committee of the Trades-Union Congress. Details of each trade are shown in the original table but only the totals for the trade groups are reproduced. The percentages have been computed; they do not appear in the original table.

NUMBER OF MEMBERS OF BRITISH TRADE-UNIONS IN 1914 AND 1920, BY GROUPS OF TRADES, SHOWING PER CENT OF GROWTH.

Trade group.	Membership in 1914.	Membership in 1920.	Per cent of increase.
Building.....	206,842	403,673	95.2
Clothing.....	91,853	284,654	209.9
Cotton.....	81,645	102,000	24.9
Dock laborers.....	208,651	382,747	84.0
Engineering and shipbuilding.....	270,111	654,689	142.4
General laborers.....	359,812	1,479,815	311.3
Metal workers.....	193,175	457,951	137.1
Miners.....	625,134	934,800	49.5
Printing and paper.....	73,608	185,437	151.9
Railway men.....	335,656	627,000	86.8
Weavers.....	279,951	471,108	68.3
Miscellaneous.....	238,987	705,227	195.1
Total.....	2,964,825	6,689,111	125.6

STRIKES AND LOCKOUTS.

Strikes and Lockouts in the United States, July to September, 1920.

ACCORDING to information received by the United States Bureau of Labor Statistics, 915 strikes and lockouts occurred in this country during the third quarter of the year 1920. Inasmuch as many reports do not reach the Bureau until several months after the strikes occur, the number of strikes occurring during the quarter was probably somewhat larger than the above figure would indicate. Complete data relative to these strikes have not been received by the Bureau and it has not been possible to verify what have been received. The figures in the following tables should therefore be understood to be only an advance statement and not to be accepted as final.

NUMBER OF STRIKES AND LOCKOUTS BEGINNING IN EACH MONTH, JANUARY TO SEPTEMBER, INCLUSIVE, 1919 AND 1920.

Kind of dispute.	Jan- uary.	Febru- ary.	March.	April.	May.	June.	July.	Aug- ust.	Sep- tem- ber.	Month not stated.	Total.
Strikes:											
1919.....	184	183	175	248	388	303	360	373	377	96	2,687
1920.....	205	194	296	399	394	348	296	277	234	183	2,826
Lockouts:											
1919.....	5	7	6	14	25	12	6	10	13	2	100
1920.....	6	5	6	5	12	14	7	15	5	7	82
Total:											
1919.....	189	190	181	262	413	315	366	383	390	98	2,787
1920.....	211	199	302	404	406	362	303	292	239	190	2,503

The largest strike during the quarter and the one that attracted the most attention was the coal strike or strikes, for there was a series of them; 100,000 anthracite miners struck September 2, 80,000 bituminous miners in Indiana and Illinois and 25,000 in Missouri in July and 15,000 in Ohio, 12,000 in Alabama, and 8,000 in Kentucky in September. The other large strikes were confined mainly to New York City and vicinity: 10,000 barbers, 8,000 longshoremen, 8,000 employees of the Brooklyn Rapid Transit Co., 5,000 knit-goods workers, and 1,000 baggagemen in August, and plumbers, van drivers, and furniture workers in September. Outside of New York the more important strikes were those of 5,000 machinists in the various plants of the American Can Co., 6,000 carpenters in Philadelphia, 4,000 rubber workers in Rhode Island, 3,500 laborers in Detroit and Philadelphia, and those of structural-iron workers, carpenters, cap and hat workers, electrical workers, and city employees of Chicago.

The data in the following tables relate to the 886 strikes and 29 lockouts reported to have occurred in the three months under consideration. A few strikes that occurred during the quarter but in which the exact month was not stated appear in a group by themselves.

STATES IN WHICH 7 OR MORE STRIKES AND LOCKOUTS WERE REPORTED AS OCCURRING DURING THE THIRD QUARTER OF 1920.

State.	July.		August.		September.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
New York.....	52	1	56	.....	37	2	15	.....	160	3	163
Illinois.....	35	.....	19	2	22	.....	5	.....	81	2	83
Massachusetts.....	26	.....	24	1	17	.....	10	.....	77	1	78
Pennsylvania.....	21	2	20	2	20	.....	13	.....	74	4	78
Ohio.....	23	2	13	.....	15	1	5	.....	56	3	59
New Jersey.....	19	.....	15	.....	15	.....	3	.....	52	.....	52
California.....	5	1	12	1	12	.....	5	1	34	3	37
Indiana.....	8	.....	15	1	3	.....	2	1	28	2	30
Wisconsin.....	9	.....	10	1	9	1	.....	.....	28	2	30
Missouri.....	6	.....	7	.....	9	.....	1	.....	23	.....	23
Connecticut.....	12	.....	4	.....	5	.....	.....	.....	21	.....	21
Iowa.....	7	.....	8	1	2	.....	1	.....	18	1	19
Texas.....	3	.....	7	.....	8	.....	.....	.....	18	.....	18
Washington.....	4	1	7	1	4	.....	1	.....	16	2	18
Minnesota.....	3	.....	7	.....	5	.....	1	.....	16	.....	16
Maryland.....	5	.....	1	.....	3	.....	5	.....	14	.....	14
Michigan.....	5	.....	3	.....	5	.....	.....	.....	13	.....	13
Rhode Island.....	5	.....	3	.....	3	.....	1	.....	12	.....	12
Louisiana.....	4	.....	4	.....	2	.....	1	.....	11	.....	11
District of Columbia.....	4	.....	2	.....	2	.....	2	.....	10	.....	10
Kentucky.....	2	.....	5	.....	2	.....	1	.....	10	.....	10
West Virginia.....	2	.....	1	2	4	.....	1	.....	8	2	10
New Hampshire.....	2	.....	3	.....	2	.....	1	.....	8	.....	8
Oklahoma.....	3	.....	1	.....	2	1	1	.....	7	1	8
Virginia.....	6	.....	.....	.....	1	.....	1	.....	8	.....	8
Utah.....	1	.....	5	1	.....	.....	.....	.....	6	1	7
24 other States and Territories.....	24	.....	25	2	25	.....	3	.....	77	2	79
Total.....	296	7	277	15	234	5	79	2	386	29	915

Of these disputes, 644 strikes and 18 lockouts occurred east of the Mississippi and north of the Ohio and Potomac Rivers; 177 strikes and 8 lockouts occurred west of the Mississippi; and the remaining 65 strikes and 3 lockouts south of the Ohio and Potomac Rivers and east of the Mississippi. In 36 strikes union officials repudiated the action of the men in striking.

As to cities, New York City had the largest number of disturbances, 80; followed by Chicago with 42, Philadelphia with 20, St. Louis and Boston with 14 each, Cincinnati, Cleveland, and San Francisco with 12 each, Buffalo and Milwaukee with 11 each, Washington, D. C., and Hoboken, N. J., with 10 each, and New Orleans with 9.

As to sex, the distribution was as follows: Males, 772 strikes and 14 lockouts; females, 27 strikes and 2 lockouts; both sexes, 85 strikes and 6 lockouts; sex not reported, 52 strikes and 7 lockouts.

The industries in which 4 or more strikes and lockouts were reported are shown in the table which follows:

NUMBER OF STRIKES AND LOCKOUTS IN SPECIFIED INDUSTRIES REPORTED AS OCCURRING DURING THE THIRD QUARTER OF 1920.

Industry or occupation.	July.		August.		September.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
Metal trades.....	44	.....	57	1	31	2	14	.....	146	3	149
Building trades.....	49	.....	46	2	25	.....	9	1	129	3	132
Clothing.....	25	1	21	3	15	.....	11	.....	72	4	76
Miners.....	27	.....	15	1	26	.....	3	.....	71	1	72
Freight handlers.....	14	.....	10	.....	17	.....	1	.....	42	.....	42
Street railways.....	14	.....	15	.....	2	.....	4	.....	35	.....	35
Textiles.....	12	1	11	.....	3	.....	2	.....	30	1	31
Railroads.....	8	.....	5	.....	12	.....	.....	.....	25	.....	25
Waiters and cooks.....	4	.....	6	.....	9	.....	3	.....	22	.....	22
Musicians and actors.....	7	1	4	2	4	.....	1	.....	16	3	19
Printing and publishing.....	2	.....	3	.....	11	.....	1	.....	17	.....	17
Bakers.....	4	1	.....	1	5	1	3	.....	12	3	15
Light, heat, and power.....	8	.....	2	2	3	.....	.....	.....	13	2	15
Iron, steel, and tin.....	6	.....	2	.....	3	.....	2	.....	13	.....	13
Meat cutters.....	5	.....	2	1	3	.....	2	.....	12	1	13
Tobacco workers.....	4	.....	6	.....	2	.....	.....	.....	12	.....	12
Barbers.....	3	.....	4	.....	3	.....	1	.....	11	.....	11
Leather workers.....	4	.....	2	1	4	.....	.....	.....	10	1	11
Shipbuilding.....	6	.....	4	.....	1	.....	.....	.....	11	.....	11
Brick and clay workers.....	3	.....	3	.....	1	.....	2	.....	9	.....	9
Broom makers.....	.....	.....	1	.....	8	.....	.....	.....	9	.....	9
Stone workers.....	1	.....	2	.....	3	.....	3	.....	9	.....	9
Coopers.....	2	.....	3	.....	1	.....	2	.....	8	.....	8
Paper and paper goods.....	3	.....	1	.....	3	.....	1	.....	8	.....	8
Street and sewer men.....	1	.....	2	.....	3	.....	1	.....	7	.....	7
City firemen and police.....	1	.....	2	.....	3	.....	.....	.....	6	.....	6
Clerks (retail).....	2	.....	1	.....	2	1	.....	.....	5	1	6
Laundry workers.....	1	1	2	.....	1	.....	.....	1	4	2	6
Lumber and timber workers.....	2	.....	2	.....	1	.....	1	.....	6	.....	6
Horseshoers.....	3	.....	.....	.....	.....	.....	1	.....	4	.....	4
Electrical and gas supply.....	1	.....	.....	.....	2	.....	1	.....	4	.....	4
Glass workers.....	.....	.....	2	.....	2	.....	.....	.....	4	.....	4
Jewelry workers.....	2	.....	1	.....	1	.....	.....	.....	4	.....	4
Telephone and telegraph.....	.....	.....	3	.....	1	.....	.....	.....	4	.....	4
Miscellaneous.....	16	.....	27	1	15	.....	3	.....	61	1	62
Not reported.....	12	2	10	.....	6	1	7	.....	35	3	38
Total.....	296	7	277	15	234	5	79	2	886	20	915

Included in the above table are 12 strikes each of carpenters and electrical workers, 20 strikes of building laborers, 10 strikes of painters and paper hangers, 23 strikes of plumbers, 13 strikes of boot and shoe workers, 15 strikes of tailors, 14 strikes of fur workers, 28 strikes of teamsters, 32 strikes of machinists, 32 strikes of metal polishers, 26 strikes of molders, 58 strikes of coal miners, and 7 strikes of silk workers.

In 597 strikes and 24 lockouts the employees were reported as connected with unions, in 23 strikes they were not so connected, in 266 strikes and 5 lockouts the question of union affiliation was not reported.

In 509 strikes and 12 lockouts only one employer was concerned in each disturbance; in 23 strikes and 1 lockout, 2 employers; in 15 strikes and 1 lockout, 3 employers; in 5 strikes, 4 employers; in 7 strikes, 5 employers; in 35 strikes and 4 lockouts, more than 5; and in 292 strikes and 11 lockouts the number of employers was not reported.

In the 402 strikes for which the number of persons on strike was reported there were 544,140 strikers, an average of 1,354 per strike. In 64 strikes, in which the number involved was 1,000 or more, the strikers numbered 480,935, thus leaving 63,205 involved in the remaining 338 strikes, or an average of 187 each. By months the figures are as follows: July, 245,824 strikers in 151 strikes, average 1,628, of whom 23,324 were in 119 strikes of less than 1,000 persons each, average 196; August, 81,366 strikers in 130 strikes, average 626, of whom 21,266 were in 112 strikes of less than 1,000 persons each, average 190; September, 213,961 strikers in 105 strikes, average 2,038, of whom 16,611 were in 92 strikes of less than 1,000 each, average 181. In the 14 lockouts for which the number of persons involved was reported there were 3,444, an average of 246.

The following table shows the causes of the strikes and lockouts in so far as reported. In over one-half of the disturbances the question of wages or hours was prominent and in about one-eighth the question of union recognition or existence was involved.

PRINCIPAL CAUSES OF STRIKES AND LOCKOUTS REPORTED AS OCCURRING DURING THE THIRD QUARTER OF 1920.

Cause.	July.		August.		September.		Month not stated.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
For increase in wages..	118	.....	110	4	82	.....	32	1	342	5	347
Because of decrease in wages.....	1	.....	6	.....	7	.....	.....	.....	14	.....	14
Nonpayment of wages..	3	.....	6	.....	1	.....	1	.....	11	.....	11
Because of increase of hours.....	1	.....	1	.....	1	.....	.....	.....	3	.....	3
For decrease of hours..	4	.....	1	.....	3	.....	3	.....	11	.....	11
For increase of wages and decrease of hours.	16	.....	17	1	14	2	2	.....	49	3	52
Recognition.....	23	1	21	2	25	1	3	.....	72	4	76
Recognition and wages.	12	.....	2	1	14	.....	1	1	29	2	31
Recognition, wages, and hours.....	3	1	2	.....	2	.....	.....	.....	7	1	8
Recognition and conditions.....	2	.....	2	1	2	.....	.....	.....	6	1	7
General conditions.....	17	.....	11	3	17	.....	.....	.....	45	3	48
Conditions and wages..	2	1	8	.....	2	.....	1	.....	13	1	14
Conditions and hours..	.....	.....	2	.....	2	.....	.....	.....	4	.....	4
Conditions, wages, and hours.....	3	1	1	.....	.....	.....	.....	.....	4	1	5
Employees discharged.	10	.....	11	.....	9	.....	3	.....	33	.....	33
For discharge of objectionable persons.....	2	.....	4	.....	6	.....	.....	.....	12	.....	12
Nonunion men.....	9	.....	3	.....	3	.....	.....	.....	15	.....	15
Relative to agreement.	1	.....	2	1	6	.....	1	.....	10	1	11
For a new agreement..	6	.....	2	.....	1	.....	.....	.....	9	.....	9
Sympathy.....	3	.....	7	.....	9	.....	1	.....	20	.....	20
Jurisdiction.....	5	.....	1	.....	2	.....	.....	.....	8	.....	8
Miscellaneous.....	5	.....	2	.....	6	.....	2	.....	15	.....	15
Not reported.....	50	3	55	2	20	2	29	.....	154	7	161
Total.....	296	7	277	15	234	5	79	2	886	29	915

It is frequently difficult to state exactly when a strike terminates, since many strikes end without any formal vote taken on the part of the strikers. The bureau has information of the actual ending of 337 strikes and 11 lockouts during the quarter, besides 5 strikes in which the positions of the employees were filled, with practically no interruption in the work.

RESULTS OF STRIKES AND LOCKOUTS ENDING DURING THE THIRD QUARTER OF 1920.

Result.	July.		August.		September.		Total.		Grand total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
In favor of employers.....	23	3	12	-----	24	1	59	4	63
In favor of employees.....	28	2	25	1	17	-----	70	3	73
Compromised.....	30	1	25	1	16	1	71	3	74
Employees returned pending arbitration.....	9	-----	8	-----	4	-----	21	-----	21
Not reported.....	45	-----	34	-----	37	1	116	1	117
Total.....	135	6	104	2	98	3	337	11	348

In the table which follows the duration of 270 strikes and 9 lockouts is given. Besides these there were 67 strikes and 2 lockouts for which the duration was not reported.

DURATION OF STRIKES AND LOCKOUTS DURING THE THIRD QUARTER OF 1920.

Duration.	July.		August.		September.		Total.		Grand, total.
	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	Strikes.	Lock-outs.	
1 day or less.....	11	-----	7	-----	3	-----	21	-----	21
2 days.....	2	-----	4	-----	3	-----	9	-----	9
3 days.....	1	-----	2	1	3	-----	6	1	7
4 days.....	5	-----	2	-----	2	-----	9	-----	9
5 to 7 days.....	8	-----	3	-----	2	-----	13	-----	13
1 to 2 weeks.....	18	1	15	-----	9	-----	42	1	43
2 to 3 weeks.....	5	-----	7	-----	5	1	17	1	18
3 to 4 weeks.....	16	1	5	-----	6	-----	27	1	28
1 to 3 months.....	39	1	23	1	20	1	82	3	85
Over 3 months.....	15	1	10	-----	19	1	44	2	46
Total.....	120	4	78	2	72	3	270	9	279

The duration of strikes ending during the quarter was 12,945 days, or an average of about 48 days. The average duration of strikes lasting less than 90 days was 28 days. By months the record is as follows: Those ending in July had lasted 5,540 days, average 46 days; in August, 3,196 days, average 40 days; in September, 4,209 days, average 58 days. In the case of strikes lasting less than 90 days the average duration was 30 days for those ending in July, 24 days for those ending in August, and 26 days for those ending in September. The duration of the lockouts was 467 days; 4 ending in July with an average duration of 48 days, 2 ending in August, average 33 days, and 3 ending in September, average 69 days.

Settlement of the Strike of British Coal Miners.¹

EARLY in November the strike of nearly a million British coal miners which began on October 16 was ended by the acceptance, subject to referendum, on the part of the workers of the Government's offer of an advance of 2s. (48.7 cents, par) per shift to persons 18 years of age and over, 1s. (24.3 cents, par) to persons of 16 and 17 years, and 9d. (18.3 cents, par) to persons under 16 years,

¹ Data taken from the Labor Gazette, London, for October, 1920, pp. 538-539, The Times, London, for Oct. 29, 1920, and the Board of Trade Journal, London, for Nov. 4, 1920, p. 534.

effective until January 3, 1921, with provision for the settlement of future wage questions by a national wage board to be set up without unnecessary delay. The advance in wages represents the original wage demands of the miners made through the Miners' Federation of Great Britain, following a decision reached on July 7. In addition the miners had requested a reduction in the price of domestic coal of 14s. 2d. (\$3.45, par) per ton. This demand was later withdrawn.

At the outset the Government refused to accede to the demands of the miners, and on September 2, following a strike vote, the Federation sent out strike notices to become effective on September 25. In the course of negotiations with the Government the miners abandoned their demand for a reduction in the price of coal but insisted upon an immediate increase in wages, while the Government maintained that any increase in wages should bear some direct relation to output. The miners desired the increase without making any guarantee as to production. They felt that the increase should be paid out of the profits on export coal, while the Government thought that the profits thus derived should be for the national benefit in relief of taxation.

In the meantime, on September 22, the other two members of the Triple Alliance, the National Union of Railwaymen and the National Transport Workers' Federation, met with the Miners' Federation of Great Britain and appointed a deputation to the Prime Minister to announce their sympathy with the miners and to demand for them an immediate increase in wages. Subsequently, at the request of the Prime Minister, the date for the strike was postponed a week, until October 2, in order that the miners and mine owners might be brought together, if possible, upon the matter of amount of output to be established as a basis in consideration of an increase in wages. The miners wanted an advance of 2s. 6d. (60.8 cents, par)² per shift for an output of 244 million tons, and of 3s. (73 cents, par) per shift for an output of 248 million tons. The owners agreed on October 1 "that if during the first fortnight of October there were indications that the output of coal was at the rate of 240 million tons per annum, an advance of 1s. [24.3 cents, par] per shift, together with an additional 6d. [12.2 cents, par] per shift for each additional 4 million tons, up to 3s. [73 cents, par] for 256 million tons, should be conceded as from October 1. If at the end of the first fortnight, or at the end of the month of October, the rate of output was found to be higher than the figures previously calculated then a corresponding increase in wages should be given dating back to October 1." The strike notices were again suspended to permit a ballot to be taken upon the revised offer of the mine owners. This ballot resulted in a vote of 181,428 in favor and 653,098 against accepting the offer, and the strike became effective on October 16.

Terms of Settlement of the Strike.

NEGOTIATIONS between the miners' representatives and the Government during the period of the strike resulted in an offer by the latter which was accepted by the representatives of the workers, and pending a referendum the strike was officially terminated on November 2, the miners for the most part returning to work by the 8th.

² The wage figure given is that for adults. The figures for youths between 16 and 18 and 16 and under in all cases are one-half and three-eighths, respectively, of the figure for adults.

Aside from the advance in wages already noted, the terms of settlement provide that after January 3, 1921, wages shall be governed for some months by a sliding scale which takes account of output and the price of export coal. Thereafter there is to be a scheme mutually arranged by the owners and the Miners' Federation, to which the Government must agree, for the permanent regulation of wages, "having regard, among other considerations, to the profits of the industry and to the principles upon which any surplus profits are to be dealt with." Stated in more detail, the provisions of the agreement are:

1. Joint district and national committees on output.
2. A joint scheme to be submitted to the Government for the future regulation of wages.
3. Adjustment of wages from January 3, and thereafter every four weeks, on the basis of export coal values. (a) The September quarter's export coal values are taken as a standard, warranting advances of 1s. 6d. [36.5 cents, par] and 4½d. [9.1 cents, par] a shift on present earnings. (b) Every increase in the proceeds of export coal by £288,000 [\$1,401,552, par] a week over the weekly average of the September quarter (after deducting 15s. [\$3.65, par] a ton as the cost of extra output) will entitle the workers to an additional 6d., 3d., or 2½d. [12.2 cents, 6.1 cents, or 4.6 cents, par] a shift. (c) All coal raised in excess of a tonnage at the rate of 219,000,000 a year will be assumed to be export coal. (d) There will be a variation of the owners' one-tenth share of surplus profits, as provided for in the coal mines (emergency) act, proportionately with the rise or fall of wages.

In commenting on the settlement of the strike, the London Times says:

In his speech in the House of Commons last night Sir Robert Horne added an undertaking given by the Government which does not appear in the agreement. He said that in consequence of the unwillingness of the miners to take the risk of fluctuations in the price of coal in the near future—violent fluctuations are expected—the Government had agreed "to regard all coal as being sold at the same price as during the September quarter." This means that the September quarter's output will be the basis for calculating rise or fall of output for the purpose of determining wages in the period before the setting up of the permanent arrangement, but the September quarter's selling price will be regarded as a fixed price from now till the end of March. In effect, therefore, output will be the only fluctuating quantity in the calculation. Last summer's price was so high that the arrangement would not appear to be to the disadvantage of the miner. A rough calculation shows that nearly half the increases in export values will be distributed as wages.

The agreement gives both the coal owners and the miners an interest in the improvement of output. The miners will gain in earnings in the manner set out above, and the owners will derive an advantage in a graded addition to their share in the surplus profits that accrue. There is the contingency on both sides that, if output declines or if at some future time the market price of coal declines, wages may fall below the maximum which the sliding scale contemplates; but if wages fall so will the profits of the owners. There is, therefore, an immediate inducement to the increase of production, and there is an assurance that, beyond the present level of wages—which seems likely to become a new minimum—the workers, as well as the owners, will share in the increased prosperity of the industry.

The text of the agreement is as follows:

1. Recognizing that on the increased production of coal there depend not only the prosperity of all who are engaged in the coal industry but also the welfare of the nation and the cost of life of the people; and having in view that this urgent need can only be met if the miners and mine owners throughout the country work together cordially for this common purpose; and further, having regard to the necessity of setting up machinery for regulating wages in the coal trade so as to get rid of present anomalies and provide against future difficulties:

The Mining Association and the Miners' Federation solemnly pledge themselves to make every effort to achieve these objects.

To that end they shall—

(a) Cooperate to the fullest extent to obtain increased output and for this purpose will arrange to set up district committees and a national committee.

(b) Proceed forthwith to prepare a scheme for submission to the Government at the earliest possible moment, and not later than March 31, for the regulation of wages in the industry, having regard, among other considerations, to the profits of the industry and to the principles upon which any surplus profits are to be dealt with.

2. Pending the preparation of the scheme referred to in 1 (b), wages shall be regulated on the following basis without prejudice to the ultimate scheme above mentioned:

(a) An advance of 2s. [48.7 cents, par] a shift to persons of 18 years of age and over, 1s. [24.3 cents, par] to persons of 16 and 17, and 9d. [18.3 cents, par] to persons under 16 will be paid from the date of resumption of work to the classes of colliery workers entitled to Sankey wage, and subject to the conditions under which Sankey wage is payable.

(b) For the purposes of this temporary arrangement the advance referred to shall be automatically adjusted on the basis set out below from January 3, 1921, in the light of the results of the five weeks ending December 18, 1920, and similarly from January 31 and thereafter every four weeks on the results of the four weeks immediately following the last preceding test period; but the Christmas holiday week shall not be counted in any such period. And an adjustment will be made in those cases where the holiday period falls wholly or partly within the New Year week.

The basis on which the advance shall be adjusted is as follows:

If the weekly averages of the proceeds of export coal during the test period are maintained at the weekly average of the proceeds of export coal during the September quarter, the advance shall be 1s., 6d., and 4½d. [24.3 cents, 12.2 cents, and 9.1 cents, par], respectively. If (after deduction of the cost of extra output) they exceed the September figure, an additional 6d., 3d., and 2½d. [12.2 cents, 6.1 cents, and 4.6 cents, par], respectively, will be paid for every complete £288,000 [\$1,401,552, par] of the excess.

(c) For this purpose the amount of export coal in each period shall be assumed to be the excess of the tonnage produced over the rate of 219,000,000 tons annually; the proceeds shall be calculated by multiplying that excess tonnage by the average f. o. b. price as shown in the trade and navigation accounts for the quarter ended September 30, 1920; and the cost of extra output shall be taken as 15s. per ton for each ton produced in excess of the rate of output for the quarter ended September 30, 1920.

(d) As part of the settlement hereby concluded, the Government undertakes to make an order under section (3) of the mining industry act which shall provide for the variation of the one-tenth share of the excess profits of the industry payable to the owners under the coal mines (emergency) act by the deduction therefrom or addition thereto of one-quarter of said tenth part for each 6d. [12.2 cents, par] by which the men's advance is reduced or increased.

(e) The certificate of the secretary for mines as to the amount of the proceeds and the advances payable shall be accepted as final.

A despatch received just as the REVIEW goes to press states that the referendum resulted in the acceptance of the Government's terms.

Industrial Disputes in New South Wales, 1914 to June, 1920.

THE State statistician of New South Wales, according to a report from the United States consul at Sydney dated September 11, 1920, has compiled strike data showing the number of industrial disputes, the number of workers involved, and the number of working days lost for each year, 1914 to 1919, and for the first six months of 1920. The most serious strike, it is stated, was in the Broken Hill mines in 1919, involving 6,375 workers, and which to the end of that year had caused a loss of 1,241,552 working days. The data compiled by the State statistician is set forth in the following table:

STRIKES IN NEW SOUTH WALES IN EACH YEAR, 1914 TO 1919, AND IN THE FIRST SIX MONTHS OF 1920.

Year and month.	Number of strikes.	Number of workers involved.	Number of working days lost.
1914.....	319	75,887	757,155
1915.....	321	98,062	634,242
1916.....	349	162,246	1,157,225
1917.....	294	145,998	2,876,328
1918.....	153	38,992	190,424
1919.....	313	125,123	2,132,598
1920:			
January.....	32	14,909	205,416
February.....	21	12,333	197,356
March.....	23	30,633	174,141
April.....	16	27,061	174,501
May.....	25	30,630	200,362
June.....	22	42,263	223,983
Total, 6 months.....	139	157,829	1,184,849

Agents of Customhouses in Spain Denied Right to Strike.

A ROYAL decree issued by the King of Spain on August 10, 1920, denies agents in customhouses the right to strike, and fixes a penalty for any delay in the movement of goods caused by cessation of work. The text of the decree is as follows:

By proposal of the Minister of the Treasury, in accord with my Council of Ministers, and heeding my Council of State,

I decree the following:

Article 1. To Article 46 of the Ordinances of the Customhouse Revenue will be added the following:

"The agents of the customhouses, due to their character as agents and business men, can not avail themselves of the law of strikes and unions in order to bring about the stoppage of the functions that they carry out, which are defined, recognized and regulated by these Ordinances."

Article 2. To Article 306 of the same Ordinances will be added the following:

"Without prejudice to the other responsibilities to which they may be subject and which may be required by the regulations, the customhouse agents will incur a fine of 125 pesetas [\$24.13, par] for the delay of each despatch of merchandise, or in the presentation of documents, that may be caused by the paralyzation brought about by the collective cessation of the functions they may exercise."

CONCILIATION AND ARBITRATION.

Award in the Fort Smith (Arkansas) Spelter Company Case.

By ERNEST T. GUNDLACH, ARBITRATOR.

On October 29 the Department of Labor received a communication jointly signed by Earl E. Buck, vice president of the Fort Smith Spelter Co., Floyd Rowe, president Smeltermen's Union No. 257, and E. F. Langdon and Alfred Bordsen, a committee representing the International Union of Mine, Mill, and Smelter Workers, requesting the Secretary of Labor to select, in accordance with their agreement, an arbitrator to pass upon certain matters in dispute. The letter reads as follows:

FORT SMITH, ARK., October 22, 1920.

To the DEPARTMENT OF LABOR, Washington, D. C.

HON. W. B. WILSON, *Secretary*.

DEAR SIR: The Fort Smith Spelter Co., of Fort Smith, Ark., and Smeltermen's Union No. 257, I. U. of M. M. and S. W., of Fort Smith, have a contract which has the following section, providing for adjustment of disputes:

"Both parties to this agreement agree to adopt the following procedure in the adjustment of any dispute that may occur during the life of this contract, to wit:

"When a grievance or dispute occurs the matter shall be taken up by a committee representing the union with the official designated by the company to perform such duties and every effort shall be made to reach an adjustment. In case a satisfactory adjustment between the company and the committee is not reached, the grievance or dispute shall be submitted to a special committee composed of three members of the union not members of the original committee and three representatives chosen by the company. In case the special committee fails to agree, a representative of the International Union of Mine, Mill, and Smelter Workers shall be called in, and if the dispute can not thereafter be settled by mutual agreement, the case shall be submitted to the Department of Labor or such other department as the Government may designate or such other body on which both parties shall mutually agree. The award of the body to which such question is submitted shall be final and binding on both parties to this agreement."

The company and the local union have failed to adjust a question of wages and request your department to assign a representative to take the evidence to be presented by the company and the representatives of the union and render a decision as to the claims of both parties, which will be accepted as final and binding upon both parties as provided by the above section in the agreement.

If convenient to your department, we would be pleased to have the conference held in Fort Smith and as early as possible, as the matter has been unsettled for some time and both sides are desirous of bringing to a satisfactory and happy conclusion the unsettled situation.

Very friendly relations exist between the company and the local union and we are glad to leave the final word in this wage difference with whosoever you may designate to take the evidence.

Kindly notify Mr. E. E. Buck, vice president Fort Smith Spelter Co., Fort Smith, Ark., for the company, and Mr. Floyd Rowe, president Smeltermen's Union No. 257, Fort Smith, Ark., for the union, when a representative of your department can reach Fort Smith.

Thanking you in advance,
Respectfully,

EARL E. BUCK,
Vice President Fort Smith Spelter Co.

FLOYD ROWE,
President Local No. 257.
E. F. LANGDON,
Representing I. U. of M. M. and S. W.
ALFRED BORDSEN.

On November 4, at the direction of Secretary Wilson, the Director of Conciliation, H. L. Kerwin, communicated with both parties, notifying them of the selection of Mr. Ernest T. Gundlach, an employer of Chicago, formerly chairman of the Employers' Industrial Commission, sent abroad by the Department of Labor following the signing of the armistice, to investigate labor and economic problems in Europe, and who had also served during the war as Assistant Director of the Information and Education Service of the Department of Labor. Mr. Gundlach's appointment was eminently satisfactory to both the employers and employees concerned. Mr. Oscar F. Nelson, Commissioner of Conciliation, stationed at Chicago, was assigned to assist the arbitrator in the gathering of data, etc.

Report and Award of the Arbitrator.

THE arbitrator fixed Monday, November 15, as the date on which he would open the hearings at Fort Smith, Ark., and his report and award which is herewith published is most complete and is eminently satisfactory to the employers and employees affected. It is printed in the MONTHLY LABOR REVIEW because it is believed it will prove most interesting to employers and employees not only in the spelter industry but in all other industries as well.

FORT SMITH, ARK., November 16, 1920.

To the Hon. W. B. WILSON,
Secretary of Labor, Washington, D. C.:

I have the honor to submit herewith report and award in the case of arbitration submitted to you by the Fort Smith Spelter Co., of Fort Smith, Ark., and its employees.

History of the Case.

This case involved a demand for an increase in wages, based by special methods of adjustment on the scale in force at the plant of Bartlesville Zinc Co., of Bartlesville, Okla., and a counter notice by the company (given several months after the demands of the men were first voiced but withdrawn in anticipation of an award by an arbitrator) to reduce the existing wages at Fort Smith 10 per cent.

A contract, copy of which is attached, was made between the Fort Smith Spelter Co. and its employees, May 20, 1919, to run one year, and thereafter indefinitely until discontinued by 30-day notice from either party. In April, 1920, the terms of this contract were slightly modified by mutual agreement, and it was further agreed that the contract be extended to August 1 and to remain thereafter automatically in force until discontinued by either party on 30-day notice. On July 8 the men notified the company that in 30 days they would expect a readjustment of wages, based on the Bartlesville scale, as further explained below. When both parties realized that they could not come to an agreement, they wrote, jointly, on October 22 to the Department of Labor to appoint an arbitrator who, in accordance with their contract, was to render a final and binding award.

The Hearing.

The hearing was opened at the Federal Building, Fort Smith, Ark., November 15, 1920, and was continued the following day at the company's plant. Present at the meetings, in addition to the arbitrator and Commissioner O. F. Nelson, of the Department of Labor, were the following: Earl E. Buck, vice president and general manager of the Fort Smith Spelter Co., and H. B. Smith, superintendent. Mr. Smith did not appear at the second session; Alfred Bordsen, member of the executive board of the International Union of Mine, Mill, and Smelter Workers; Floyd Rowe, president of Local 257, and W. V. Wells, secretary of the same local, and Victor Baert, W. G. McHainy, and J. W. Shiffler, being the committee of the men in the plant.

The Evidence: Presented by the Men.

Evidence presented by the men showed that the impression was general among the workmen in the Fort Smith Spelter Co. that the scale of the Bartlesville Zinc Co. should serve as a standard for other smelters in the Southwestern territory.

The contention of the men involved two distinct groups of employees. Those who are affected by the size and character of the furnaces and those not so affected.

It was contended that the men working on the furnaces should be paid according to the number of retorts in each furnace. It was pointed out that at Bartlesville there were only 288 retorts in each furnace, while at Fort Smith each furnace contained 320 retorts. Therefore, it was claimed, more work was required on a Fort Smith furnace, or, specifically speaking, more hours of work were required, assuming the same amount of effort per hour, and that therefore the men at Fort Smith should receive 320/288 per shift of the pay at Bartlesville. It was frankly stated, however, that the Fort Smith men were at this time drawing more actual pay per day than the men at Bartlesville, but that they were drawing less pay, per effort (or per hour at the same effort). A shift is one day's work of about four hours under intense heat, the number of hours being not specified and the day's work being completed when each man's particular job at his furnace is finished.

As for the men whose work is not affected directly by the size of the furnace, specific instances were cited, though not in the form of formal evidence, of individuals, or groups of individuals said to receive higher wages at Bartlesville and also in a few cases elsewhere, than at Fort Smith. It was pointed out by the men, however, that no demand was made for change of wages by the arbitrator in these individual instances, but that these instances were being cited by the men merely as illustrations to prove that the wages (effort considered) were actually higher at Bartlesville than at Fort Smith.

No evidence, however, was produced to indicate that this particular company had been accepted as a criterion in any negotiation between the employer and employees at Fort Smith or elsewhere, except in so far as the acceptance of the closed shop by the Bartlesville company had been awaited by other companies before being also accepted by the latter, this being due, it was stated, to the great influence of the American Metal Co., which it was stated, controlled the plant at Bartlesville. No evidence was produced to show in what respect the Bartlesville plant's scale was or might be or ought to be regarded as an average or standard for the industry.

In view of the paucity and almost utter absence of any definite information as to the prevailing scale of wages in other plants outside of Bartlesville, this being information that the arbitrator repeatedly tried to secure, the men asked for a continuance in order to gather this information. Such continuance was granted by the arbitrator on condition that the evidence would be gathered promptly; that is, within a week, or at most, 10 days, since the company was withholding a threatened cut in wages. On further consideration, however, the men at the second day session waived their privilege of a continuance and agreed to receive the award at once.

Since the evidence presented by the men was either all verbal or only on informal and not fully prepared papers, it was mutually agreed between the men, the company, and the arbitrator that the men should be allowed to file a statement of their case, embodying in writing the statements made verbally and forwarding these to the arbitrator within a reasonable time, with the agreement that they be made part of the record of the case in the files of the Labor Department at Washington, D. C.

The Evidence Presented by the Company.

On behalf of the company, the general manager read a statement, copy of which is attached and made a part of the record. He then made a supplementary verbal statement copy of which in written form will, by mutual consent, be transmitted to the arbitrator and made a part of the record.

Some of the manager's principal points were that the retorts at Bartlesville were larger than those at Fort Smith, so that the number of cubic inches per furnace was almost identical in the two plants; that special adverse conditions prevailed at Bartlesville, making this plant no criterion; that the company at Bartlesville could not alter its scale under present conditions but was forced to adhere to its contract until February 1, 1921; that the only plant which, so far as he knew, had followed the Bartlesville scale, i. e., the plant at Van Buren, had just made a large cut in wages because of alleged impossibility of continuing under the former scale, this cut resulting in a strike; that the wage scale at Fort Smith was fully up to that of the other plants (though he admitted upon examination that he had no definite figures of scales in general nor of average scales); and, finally, that the prevailing price of zinc, in the

face of high costs of materials with increased freight rates, was such as to necessitate a reduction in wages. The plant, he said, was being operated at a loss and was piling up hundreds of thousands of dollars worth of zinc, unable to sell it. In fact, he added, no dividend had been declared by the company since 1917.

The manager stated that there was no attempt on the part of the management to modify the contract as regards the closed shop. It seemed to the arbitrator, who is himself an employer, that the absence of any contention regarding the rights of the union within the plant greatly facilitated the proceedings in the interest of all parties concerned.

Upon examination the manager agreed that whenever any company faces wage demands by arguments as to what the company can or can not afford to do, that then it becomes the right of the men to inquire into every detail of facts as to the truth or accuracy of this argument. The manager further acquiesced in the view that it becomes the duty of any company, which claims that it can not afford to pay a certain wage, to let its men know exactly what are profits and losses and exactly what is meant by profits and losses.

A Basic Concession.

Accordingly, the management of the Fort Smith Spelter Co., of Fort Smith, Ark., agreed, subject to the approval of the majority of its stockholders, which the manager said could confidently be expected, but not as a condition binding under this award, that the employees of the Fort Smith Spelter Co. may now and hereafter, at any and all times ordinarily convenient, be permitted to see the profit and loss statement of this company, in the same manner and within the same convenient periods that any partner would have a right to expect; also, that this profit and loss statement would be subject to complete explanations, including a statement of executive salaries in a lump, as distinct from other salaries and wages, and specification of the names of those included in executive salaries; and including also full details of all expenses charged in the shape of interest on investments, and of depreciation; also, that the men or any authorized representative whom they might select, such as an auditor, would be permitted at all times, within reasonable periods such as a partner might expect, to check up the profit and loss statements with the books of the company; also, that this privilege of examination of statements and books be extended, not only during periods when the company claims a loss but also at all other times in the future when the company might be making profits.

No obligation of profit-sharing nor obligations for changes in wage scale according to conditions of profit and loss were implied by this privilege, but merely the right of the men to be fully conversant with all the detailed figures of profit and loss. Full knowledge of all these details by the men, the manager stated, would be welcomed by the management.

Conclusions of the Arbitrator.

This case has gone to arbitration on demands from both parties for the modification of an existing contract. Such modification can be awarded only upon the presentation of ample evidence showing cause for modification.

Even were the evidence definite or conclusive as to a higher wage scale in some single competitive plant, such evidence can be used for the purposes of an award only when supported by further evidence to prove that such scale in another plant is particularly equitable or that it is a criterion by which many other plants are largely guided, or that the wage scale in this particular plant is cited as an example of a standard of wages in the industry, which standard must then be proven by supporting evidence with at least a reasonable degree of approximation.

This request for an award to raise wages merely because of an alleged higher scale in one single neighboring plant, with only the barest informal reference to individual wages in other plants, involves particular danger. Even if the facts had been fully established that in another nearby plant, operating under exactly the same conditions, the wage scale was higher, an arbitrator rendering an award on such single evidence would run counter both to fundamentals of equity and the fundamentals of sound industrial policy. He would build a dangerous precedent, dangerous both to business interests and to labor.

For if a settlement in one plant between its employers and its employees is to give a quasi legal color to demands from either employers or employees in other plants, then the very settlement of the first controversy becomes a cause for contention in other plants. Employers, scenting a common danger, would then be far more reticent to grant labor's demands in individual factories, where the necessities or special opportunities of that particular plant, or perhaps a desire to experiment with an unusually liberal wage scale, would otherwise make the concessions to labor possible.

Students of industrial problems have seen how the breaking down of central control by unions in Great Britain and the consequent settlements, separately, of disputes in each individual plant, based merely on the wages paid in some near-by similar plant, brought general disorganization, this being in the judgment of many students, without doubt, by far the largest single factor in making the present industrial unrest in Great Britain and causing, one might almost say, the uncertainty of Great Britain's industrial future.

But if the wage scale of a single plant may be accepted as standard, the evidence in this case was not such as to justify an award for an increase in wages; hearsay evidence, gossip of men or managers, isolated instances of a higher wage given to individuals or small groups, and suppositions regarding conditions in competitive plants can not be accepted as conclusive evidence on which to award higher wages.

Neither can a precedent be set for adjusting wages according to indefinite theories as to the amount of effort required under varying conditions. Additional effort should be expressed in terms of additional hours of the same effort. To establish comparisons under varying conditions, the arbitrator must have the facts presented after careful study by the most reliable and impartial experts.

On the other hand, as regards the demand for a cut, the arbitrator felt that the figures so far presented by the management were not in reality conclusive evidence, but only indications of a probably coming need for cutting wages. For instance, whether or not the company was actually operating under a loss and making zinc merely in order to keep the plant running, or whether it was making zinc which would show a loss at current market basis and holding this zinc in anticipation of a higher market, thus permitting an ultimate profit on the current products of labor, could not be established from the evidence. Furthermore, no profit and loss statement was produced, but most of the evidence consisted of figures showing comparisons with former conditions.

The Award.

I find and award that, in view of a lack of conclusive evidence justifying a modification of the existing contract, the present scale be continued at the Fort Smith Spelter Co., subject, however, to the existing contract, which permits either party to modify this contract by giving 30 days' notice.

In conclusion, the arbitrator desires to call the attention of the Secretary of Labor to the exceptional sense of fairness shown by all parties in this controversy. The men were extremely careful in checking up every statement, explaining just how far it was within their actual knowledge, or merely an impression. The manager showed an exceptional spirit of cooperation and the utmost willingness to help the men in the presentation of their own case.

E. T. GUNDLACH,

Arbitrator (appointed by the Secretary of Labor).

An interesting feature worthy of note is that the management also made an important concession, since it is agreed—subject to the approval of the stockholders—that employees shall have the privilege of reviewing the profit and loss statements of the company, just as a partner in the enterprise would be given access to the books, and that the men may select an auditor to check up statements, etc., both when the company claims profits and when it claims losses, as these profits or losses would affect wages. No proposal looking toward profit sharing is admitted.

Conciliation in Labor Disputes in Denmark in 1918.

ACCORDING to a Danish report just issued¹ the total number of disputes occurring in Denmark, which were the object of some action by the conciliators, was 235 in 1918, as against an average of 82 for the years 1907–1917.

¹ Denmark. Socialstyrelsen. Statens förlikningsmäns förmedling i arbetstvister verksamhet år 1918. Stockholm, 1923.

In each of these cases the services of the conciliator were either offered or requested. In some cases, however, no negotiation took place before the conciliator, either because the parties had refused the offer of mediation or for some other reason, as, for example, that the dispute had been settled before the offer of intervention or immediately after. Thus, although during the year 1918 mediation by the conciliators was attempted in 235 disputes, conferences took place in only 154, or 65.5 per cent of the total number.

In 118, or 76.6 per cent, of the total number of conflicts there was a suspension of work. Negotiations before the conciliator involved 1,537 employers and 34,161 workers; disputes in which work ceased involved 1,279 employers and 24,920 workmen. In 1918 the services of the conciliators were made use of in 21.2 per cent of the disputes (affecting 40.7 per cent of the workmen) in which there was a stoppage of work.

The initiative toward mediation came in 135 cases from the conciliator, in 8 cases from the employers, in 4 cases from the workers, and in 7 cases from both parties to the dispute.

With regard to the distribution among industrial groups, mines and metal industries and preparation of foods occupied first place, with 22 disputes each. Then followed the building trades, with 20 controversies; and lumbering and woodworking with 17. The building trades showed the greatest number of workers involved; in 1917 mines and metals occupied first place in this respect, and in 1916 the building trades.

Of the 154 cases in which conferences were held before the conciliator, 115, or 74.7 per cent, were caused by demands for an increase in wages; 16, or 10.4 per cent, by demands for collective agreements; 7, or 4.5 per cent, by questions connected with the hiring and firing of workmen; 6, or 3.9 per cent, by controversy as to the length of the working day; and 4, or 2.6 per cent, by questions of interpretation of contracts. Disputes over decrease of wages and questions concerning the right to organize were of the least importance, in point of numbers.

In 128, or 83.1 per cent, of the 154 disputes mediated a definite agreement was reached through mediation. In 26 other cases, or 16.9 per cent of the total number mediated, either an agreement was reached by the parties themselves or the dispute remained unsettled. Of the disputes settled by the conciliators, 94, or 61 per cent, were compromised, while 28, or 18.2 per cent, were settled in favor of the workers, and 6, or 3.9 per cent, in favor of the employers.

WHAT STATE LABOR BUREAUS ARE DOING.

Handling Eight-Hour Law Violations in Colorado.

THE Deputy Labor Commissioner and Chief Factory Inspector of Colorado, at the Seventh Annual Convention of the Association of Governmental Labor Officials of the United States and Canada, held last July in Seattle,¹ made a favorable report on the enforcement of the 8-hour law for women in Colorado. He declared, however, that the law was being violated in a number of small towns in the interior of the State. There being only four inspectors and the appropriation for traveling expenses being meager, these violations are handled by letter. When a complaint of violation is received from an outside source, a personal letter inclosing a copy of the law is sent to the offender, asking cooperation. If the first letter is not effectual, a second communication, more or less peremptory, is sent. It is stated that there is very little trouble after the second letter, but if another complaint is received, it is, without further notice to the offender, turned over together with the evidence, to the district attorney.

The telephone exchanges of Colorado come under the 8-hour law for women. The girls of the Denver telephone exchanges, however, average only 7½ working hours.

One of the difficulties in connection with the enforcement of this 8-hour law in Colorado, the commissioner declares, is the lack of cooperation on the part of the women themselves, who frequently work over hours without bringing the matter to the attention of the proper authority.

General Report of the Georgia Board of Public Welfare.

THE general review (pp. 11-20) of the first annual report² issued by the Georgia Board of Public Welfare reveals a state of affairs calling for radical reform, particularly in relation to the care and placing of children, pauper relief, and almshouses. Under promiscuous child placing an instance is cited of a maternity sanitarium which advertised babies for adoption and in which it was found that babies as young as three days old were given out apparently to any one who called for them, no attempt being made to see that the ones taking them were proper persons to have these children in their care. Several of these babies were traced. One was found to have been given to a woman who applied under an assumed name. Another baby was found, by the woman who took it and who stated that she had been asked for no references, to have an infectious disease. Another was given to a woman of low character who later abandoned it. Still another baby, whose state of health demanded the best care, was found in a tubercular home. Under the existing

¹ Proceedings to be published as Bulletin 266 of the United States Bureau of Labor Statistics.

² First annual report of the State Board of Public Welfare. Atlanta, 1920. 428 pp.

laws the board was unable to do more toward remedying such conditions than to give the facts publicity.

The children's institutions were made a special subject of study by the board. Thirty orphanages and homes were visited and in but two instances was discontinuance recommended. The effort to maintain good standards was general, though instances of overcrowding and lack of necessary equipment and of failure to provide systematic education and vocational training and adequate medical examinations on entrance were encountered. Examples were found in which original methods of getting away from mass treatment and of developing the individuality of the child had been adopted, while others encouraged the normal mingling of the children in public school and at play with children from family homes. The special needs of dependent children for education and vocational training in order that they may be able to make their way in the world made the lack of such training much to be deplored. Only one institution had recognized the problem of the widowed mother and provided for payment of a grant or subsidy to mothers who would thus be able to keep their children at home. The State has no mothers' pension law, such as is in effect now in 39 States, and the commission points out the need for such legislation.

The need for an almshouse system which should be a benefit and not a detriment to the public was recognized by the members of the commission. In the course of the investigation by the board it was learned that some counties in the State, in their desire to administer their funds economically, had sent those needing almshouse care to the county prison farms where it was impossible for the aged and infirm to receive proper treatment. The selection of farm sites for almshouses was also found to be a mistake since in selecting a superintendent it is most natural to select one qualified chiefly as an agriculturist and in that case the care of the inmates is subordinated to the care of the farm. In order to provide better conditions for those needing such care the board suggested that it would be advisable in cases where the pauper population is small in several adjoining counties for these counties to unite in maintaining one institution.

Whether the system of outdoor relief in the State was calculated to raise people to independence or to promote pauperism was the principal object of the board's inquiry into this form of assistance. Conditions were found to be generally very bad in relation to the granting of pauper relief in the homes, as the most common measure by which this relief was granted was by recommendation of the grand jury—a body which the board regards as unfitted to pass upon such questions satisfactorily. In many instances, too, no subsequent investigations were made to determine whether the recipients still needed such relief. The general desire seemed to be to keep such expenditures as low as possible, with the result that the totally inadequate sum of between \$5 and \$6 was the average allowance, with this allowance frequently going as low as \$2 a month.

Some of the remedies for these conditions suggested by the board, in addition to those already indicated, were that parents should be forbidden to surrender their children except after review by the courts, and the extension of the juvenile courts throughout the State, and of the duties of the probation officer of the juvenile court so that

this one official in each county would fill the general position of welfare worker. Existing laws were found by the board to be sufficient in all but a few cases to effect the needed reforms, but as is so often the case more effective administration is demanded.

Consultation Work of the Indiana Department of Women and Children.

ACCORDING to a report made last July at the Seattle meeting of the annual convention of the Association of Governmental Labor Officials of the United States and Canada,¹ approximately three-fourths of the time of the Indiana Department of Women and Children had been taken up with conferences with employers at their request, looking to the bettering of the conditions and a raising of the standards for the employment of women and children. The department is to constitute an "outpost of observation" on changing conditions concerning women and children in industry, and will advise with the board in reference to proposed legislative action on such matters.

Wage Claims Handled by the Minnesota Court of Conciliation.²

IT IS estimated that in the early history of the Minnesota Conciliation Court the wage claims reached a maximum of approximately 60 per cent of all the cases heard by that body, but that from August 13, 1917, to August 4, 1920, the total number of wage cases was about 33½ per cent of the total number of cases (14,187) handled by the court in that period, or approximately 4,729 cases. The following statement shows the disposition of the cases handled during the three-year period:

Settled before hearing.....	3,092
Settled in court.....	1,397
Cases tried, both sides being heard.....	8,134
Judgment for plaintiff.....	5,879
Judgment for defendant.....	1,249
Dismissed.....	1,006
Default judgments.....	3,239
Appeals.....	117

Activities of New York State Industrial Commission.³

THE New York State Bureau of Women in Industry reports that there is no subject about which it has received more requests for advice than the seating of employees. Because of these constant demands that bureau has been gathering information concerning various kinds of factory chairs designed to "eliminate fatigue and increase production."

Industrial engineers and manufacturers all over the country are sending to the bureau pictures of specially designed chairs that are being used at the thousand different processes which modern machinery has brought to industry. Many jobs

¹ Proceedings to be published as Bulletin No. 266 of the United States Bureau of Labor Statistics.

² Source: Information forwarded by the Commissioner of the Department of Labor and Industries of Minnesota in a letter under date of November 4, 1920.

³ Data taken from the Bulletin of the New York State Industrial Commission for August (p. 217) and September (p. 237), 1920, and from a communication by the commission to this Bureau, dated Oct. 15, 1920.

at which the worker formerly stood have been converted into sitting jobs through the energy and imagination of some foreman or manufacturer.

The excerpts given below show the importance employers attach to the problem of good seating:

A clock manufacturing company, referring to a chair on a track used by women who tend six semiautomatic machines at once, says: "The women all seem to appreciate the fact that they can ride, instead of walk, from one machine to another."

The following letter shows what imagination can do: "The chairs were designed by us to enable the operators of certain machines to work in a sitting position, on what had previously been a wholly stand-up job. The old machines were high and of such length that the operators could not reach the ends without stepping along. We redesigned these, made them low down, shortened them up, and designed this swing seat so that the operator can easily reach all parts of the machine without getting out of the chair. This works perfectly and has increased production with much less fatigue to the operator."

A leading collar company writes: "We have in mind two chairs especially designed to prevent fatigue. One is a seat on a sliding track used by workers operating ironing machines. The other is a chair with a foot rest attached to the bench."

A clothing manufacturer writes of a chair designed by an industrial physician: "While some of the employees objected to them at first, they are very popular at present. Their chief advantage is that they support the back and do not cut off the circulation of the legs. They are made in four different heights."

A hosiery manufacturer writes: "We are substituting chairs for stools for our toppers in order to increase production, as the chairs are more comfortable than the stool and the operators can relax more easily."

Another company states that it is adapting stools to different sized workers and to their special tasks and "It has been found that foot and back rests are a great assistance in lessening fatigue."

As examples of the requests for information on industrial seating, which are being received by the New York Bureau of Women in Industry, the following are quoted:

We shall be very glad to have information concerning improved types of chairs or rests for women operating punch presses or sitting at benches.

We have been testing some metal stools for buttonhole operators but have not yet decided on the style which we will permanently adopt. We shall be glad to know what the experience of other firms has been in using metal chairs.

We have a few jobs where the workers can remain seated and would be very glad to obtain any information that you might gather in regard to adjustable back chairs or foot rests.

We have not yet procured satisfactory chairs for standing jobs and are still using the old-fashioned stools.

We are using the common ordinary kitchen chair for our women, but are always open to suggestions which would be an improvement.

Bureau of Mediation and Arbitration.

It is planned to have the New York Bureau of Mediation and Arbitration take up the study of methods of personnel administration and conference relationships and through consultation with employers and labor leaders aid "in the development of measures which will make possible the necessary economic adjustments with a minimum of strikes, lockouts, and other disturbances in the State of New York." Two "industrial counselors" have been appointed for this work. Information will be gathered as rapidly as possible on safety organization, employment management, trade agreements, labor turnover, training, means of determining piece rates, and kindred subjects and made available to both employers and employees. The industrial counselors will also stand prepared to make special labor surveys "as they may be desired by employers, or workers, or members of the [New York] Commission."

Industrial Safety Code Making.

One of the commissioners of the New York State Industrial Commission reports that the commission is making great progress in the work of drafting industrial safety codes.

Within certain limitations laid down in the State labor laws the commission is given power to draft "codes" for certain industries, which have the force and effect of law, after approval by the full commission and the industrial council, an advisory body made up of an equal number of employers and employees. These codes are first drafted by the commission's Bureau of Industrial Code made up of three commissioners and two deputy commissioners, working in conjunction with advisory committees of experts, representing employers and employees in the industries affected. Public hearings are held in the principal cities of the State at which criticism is asked of the tentative code. After these hearings the bureau revises the code in such respects as are found necessary and then it is sent to the commission and council for final action.

The commissioner states that within the last three or four years the commission has put into effect codes concerning mines and quarries, dangerous machinery, fire-alarm signal in factories, automatic sprinkler systems, fire escapes in factories, foundries, smoking in factories, boilers, window cleaning in factories and mercantile establishments; erection, demolition, and repairs of buildings—the first state-wide code of its kind in the United States—and elevators in factories and mercantile establishments.

The building code became effective July 1, 1920, and the elevator code took effect immediately upon its approval, July 20. The new building code formulated to standardize construction apparatus is regarded as a decidedly forward step. The need for this code is indicated by the following statement:

It is peculiar but a fact, nevertheless, that while to-day, due to constant and persistent corrective efforts, industrial accidents due to defective and unguarded machinery show a constant reduction, there are relatively more accidents in work incidental to construction than in the completed plants after the machinery is installed and in operation.

Codes are now being formulated for inflammable and explosive materials; tunnels; head and eye protection; artificial lighting; special trades and processes—chiefly applicable to industries where poisonous chemicals and gases are employed; fire hazards and fire exits in mercantile establishments; ventilation, temperature, and humidity. Further amendments are being made to the code for dangerous machinery.

Investigation of Woman Labor in Oregon.

THE Bureau of Labor Statistics and Inspector of Factories and Workshops of Oregon has made an investigation of woman labor in that State, and has also collected data relating to the number of Japanese and Chinese, the wages received, and the amount and value of property owned by them. These data will form the basis of the Oregon bureau's ninth biennial report. Advance figures of these investigations have been furnished this bureau and are summarized in this issue of the REVIEW, the women in industry figures being given on pages 122 to 125 and those relating to the Chinese and Japanese on pages 212 and 213.

It is stated that the Oregon Bureau of Labor Statistics will take up an investigation of retail prices after January 1, 1921.

LABOR CONDITIONS.

Attitude of the Department of Labor Toward Admission of Chinese Industrial Students.

By ETHELBERT STEWART, UNITED STATES COMMISSIONER OF LABOR STATISTICS.

THERE is a long background to our relation with China from an educational standpoint. Our treaty relations appear to have been based upon the idea of the admission of Chinese for industrial purposes only when the industrial conditions in this country were such as to offer plenty of work for them to do in excess of the capacity of American labor to perform—in other words, in such periods during which there were no American unemployed, and when Chinese labor could be immediately and profitably used, and only during such times.

The representatives of the Chinese Government, wishing to safeguard the privileges of merchants, travelers, and students in universities, secured a clause which excepts these classes; that is to say, permits them entrance into the country regardless of economic conditions here. Our Congress, however, acting upon the theory that the treaty permitted the peremptory exclusion of all other than the excepted classes, has built a wall around Chinese immigration which is exceedingly effective. It excludes anyone who is a wage earner under the general acceptance of that term. Unquestionably, the Secretary of Labor is given great discretionary powers in determining the scope and meaning of the term "student." Heretofore, the interpretation has been that any Chinese student attending a university in the United States who during his school term shall work for wages to earn money, even if this money is to be used in the completion of his education, becomes a Chinese laborer and can be returned to China under the coolie labor exclusion laws.

Under the old Chinese régime, this ruling was necessary, and was really a hardship to no one, but a number of things have happened in China. First, when the United States Government donated to China the enormous fund which this country had been awarded as damages following the Boxer uprising, it was with the distinct proviso that the money was to be used by the Chinese Government only for the purpose of furthering the cause of education among the Chinese people. The present Chinese Government from this fund now allots the sum of about \$400 to each student selected to take a course in education in a foreign country. As \$400 will not pay the expenses of a three or four years' course of training in the schools of any country, and as the regulations of this country have prohibited Chinese from earning wages while in this country under the classification of "student," it has resulted in a large number of Chinese youths being sent to French, English, and Italian schools, subsidized by money which was given by the United States, whereas they can

not enter the United States itself upon the same terms. Even this was not a serious matter so long as the Chinese youths being sent to foreign universities were of the nonindustrial class and were attending only academic and cultural schools.

Still another phase of Chinese life, however, has developed, and this perhaps can be better stated by an extract from a letter which the writer received from an official of the Peking University, Peking, China, in August, 1920.

One matter weighs heavily on me and this work now. I mean the ruling of the Immigration Bureau that students who come here from China are not permitted to enter industrial plants on wages; the ruling, as I understand it, classes them as coolies as soon as they earn wages.

Now, you may not understand how this does now and will hereafter affect the industrial relations between this Nation and China. Because industrial students will not be allowed to come to this country, there is now a stream of these young men flowing into France. They prefer to come to the United States, but they will not be allowed. Now what will be the result of this diversion of the very type of young men that we should by all means have come to our coasts? Of course, when they return to China they will be more attached to Frenchmen than to Americans, and will purchase the machinery that is needed for the new plants that are put up from the French. A man in your position does not need that I write a long letter showing the consequent evil results flowing from this short-sighted policy. These students are not in any way interfering with the spirit of the exclusion laws. They will all go back to their own country, and the few thousands that would come would not interfere with the wage problem. On the contrary, if they came to this country to learn, they would purchase machinery from this country and make it necessary to employ many times their own number of American workmen to manufacture this machinery. But outside of this the ideals that they would get here which they can never get in France, make it our duty to draw them to this country.

But, you will say, China is now sending a great many students to this country. Yes. But the sad condition remains, that of the returned students to China only a small percentage of them finds its way into real employment. In Peking there are over 2,000 of them, all graduated from foreign universities, lying idle, and wasting their life. Why is this? The young men that are being sent have been of the official and literary classes. We must have artisans trained if we are to succeed in the industries. We want these young men to earn their living here as young Americans of like sort do here now. We want industrial democracy taught in China, and a blind man can just as easily teach perspective drawing as these young snobbish returned students teach anything democratic.

Industrial Students, Not Coolie Labor, Admitted.

A CAREFUL examination of the files of the Department of Labor, however, reveals that the writer of the above was not cognizant of the most recent rulings of the Secretary of Labor upon the issues raised. Of course, the real difficulty is in securing satisfactory guaranties that the Chinese admitted here as industrial students will be returned to China promptly and without expense to the United States Government upon completion of their education and industrial training courses. It would be simply impossible for the Department of Labor to keep track of each student and charge itself with the responsibility for his return.

Again, obviously there would be nothing gained by liberalizing the terms upon which the sons of wealthy Chinese merchants, sons of the official and wealthy classes in China, can come to this country for the purpose of attending our cultural schools. It is not claimed by those most interested in China's industrial and economic development that any great benefit has accrued to China industrially from the education of these youths. That some reliable agency should

be organized, therefore, to select Chinese youths from the industrial field for the purpose of securing industrial training and vocational education in our recognized technical, industrial, and part-time schools, guaranteeing the return of such students at the close of their educational period here and in some manner vouching for their making practical application of their mental equipment to the industrial conditions in China, was necessary before the serious consideration of the new problems that presented themselves, was worth the while of the Department of Labor. Unfortunately, the propositions that have been coming up to the Department of Labor, as shown by the files for a number of months, have not been entirely free from suspicion that the manufacturers of certain lines of machinery and tools and alleged to be interested in their introduction into China, have also in mind the importation of Chinese workmen to manufacture these tools under the guise of students, without any apparent willingness to bond themselves to return these Chinese student workers to their native country. Of course, the statement may be made that the service of these student workers having been trained here in the manufacture of these machines would be of infinitely more value to the American manufacturers in China than they would be here, and that self-interest would see to it that these young Chinese were sent home to introduce the American machinery there. No doubt in a great many instances this would be true, but no Federal department could afford even to consider a proposition which contained an element of doubt, much less a suspicion of possible unfairness.

Nothing definite, therefore, was done until the formation of the Chinese Merchants' Association. The attitude of this association, like that of many of the professors in Chinese universities, is that the only hope of finally getting away from the strained relation between China and other governments on account of the Chinese coolie-labor problem is to develop China industrially and solve the coolie problem at home by changing the coolie into a self-supporting self-respecting workman with standards of living as high as those of the workers of other countries. As to the natural resources of China there can be no question. With the labor of the nation, which we have termed "coolie," but which in the Chinese is "k'uli," which literally means strength, applied to China's unlimited mineral and agricultural resources, there is no good reason why the Chinese worker's food should be rice. The Chinese Merchants' Association, therefore, proposes properly to select youths in China and to be responsible under approved bonds for the education in American technical and part-time schools of such youths, with a view to their return to China, there to act as foremen and instructors of other Chinese workers.

Proposal of the Chinese Merchants' Association.

THE first definite proposal of this association is contained in its letter to the Department of Labor under date of June 3, 1920, and is in part as follows:

Our association desires to bring to this country for the purposes of education only a large number of Chinese students, amounting in the next two years to several hundred. It is our desire and intention to place these students in industrial schools and

colleges, so that they may learn American methods of industry and become familiar with American machinery.

As rapidly as these young men complete their education they will return to China to become instructors there of other young Chinamen.

We estimate that the average time that each of these young men will be in this country will be about three years. These young men will be carefully selected in China from good families and will be placed in as high educational establishments in this country as their preliminary education and respective knowledge of the English language will permit.

In the main these young men will not work at all, except that in a few institutions in the South, where cotton textile machinery is taught, the young men as a part of their course will work on actual machinery in an actual cotton mill, but not for compensation.

We are aware, of course, that the bringing of Chinese young men to this country as students is in accordance with the treaties between China and the United States, and also permitted by the statutes of the United States.

We realize fully that the difficulty has been and is to work out a satisfactory method by which it is certain, first, that these young men come as students, and second, that upon completion of their studies they will return. That is the difficulty of the United States authorities. Our difficulty is the uncertainty whether a duly qualified bona fide student who lives in China will be certainly admitted into this country.

We are willing and desire to cooperate with your department in permitting both of us to solve our respective difficulties.

We were highly gratified at our reception this afternoon. We were especially gratified at being told that our application would be to sympathetic minds. We fully appreciate that you will desire to look into the matter fully. We shall take pleasure in coming to Washington for as frequent conferences as you find necessary and in supplying you in writing with any information which may be within our power and which you may request.

Of course, it goes without saying that these students while here will be maintained at the expense of our association. Our motive in making this application is not entirely unselfish. We not only have considerable interests in this country, but they are of such a character that if the industries of China grow, flourish, and prosper our business here will increase.

Attitude of the Department of Labor.

THIS matter having been referred to Hon. W. B. Wilson, Secretary of Labor, in the form of a memorandum, the following memorandum in reply was made by him under date of June 15, 1920:

Referring to the memorandum hereunder, if the proposition of the Chinese Merchants' Association contemplated bringing Chinese labor into competition with American labor under the guise of making them students, I would not for a moment give consideration to the suggestion. We have all the racial problems in the United States that we can properly deal with at the present time. Racial problems are always accentuated by economic competition. It may be that in the case of the Chinese the racial antagonism is due principally to economic conditions and different standards of living. There is only one way of determining whether that is or is not a fact, that is, by creating conditions that will enable the Chinese to increase their industrial effectiveness and improve their standards of living at home. The long period of organized government and civilization that the Chinese have behind them would then have proper weight in determining racial relations.

Exclusion laws always create more or less international irritation. As long as the economic conditions of China remain as they are, our exclusion laws will be retained and the basis of irritation continue to exist between the two countries, not only because of those who are excluded but because a proper administration of exclusion laws requires the examination of those who are not excludable as well as of those who are excludable in order to determine the fact. If by teaching the Chinese our methods we can improve their economic standards to a condition comparable with our own and thereby reduce or eliminate racial antagonisms, our exclusion laws can be very materially modified without injury and in fact with advantage to our own country. At best that would take a long time. The longer the beginning is delayed, the longer it will be before the end is achieved.

It is proposed to bring young men from China and enroll them in certain industrial schools and colleges in the United States to learn our industries both from a theo-

retical and a practical standpoint, and then return these students to China where they will quite naturally introduce American methods of manufacture. This is very much different from some of the suggestions we have heretofore considered, which proposed the admission of Chinese students to acquire an academic education with permission to work in competition with American labor as a means of earning the money to pay their way through school. The primary purpose is a thorough theoretical and practical education for the student, with a view to introducing American methods of manufacture in China. The element of competition with American labor is eliminated and the basis laid for industrial development in China which will be an inducement for the Chinese workman to remain at home. The proposition appeals to me as an experiment worth trying if it is properly safeguarded. We should be sure not only that the bond furnished is sufficient to secure the return of the student, but that the primary interest of those who are sponsors for the plan is to secure the return of the student to promote the industrial advancement of China. It should be impressed upon the Chinese merchants, organization that it is accepted only as an experiment and that the department reserves the right to cancel the general arrangement at any time for reasons sufficient to itself; that during the period determined upon for schooling it will not disturb the students who have been brought in even though the general arrangement may be cancelled, but the department reserves the right to deport any Chinese brought in as a student who refuses or fails to carry out the purpose for which he was admitted.

Final Rulings of the Department.

THE matter was considered for several days and the department's final rulings are embodied in a letter from the Department of Labor to the Secretary of State under date of July 6, 1920, as follows:

I have the honor to advise you that this department has recently given consideration to an application made by the Chinese Merchants' Association for permission to bring to the United States a number of young men of Chinese race and nationality with the object of placing them in industrial schools and colleges, particularly certain textile schools of the South, to learn the cotton and other textile industries from both a theoretical and practical standpoint, the object being to then have these young men return to China to engage in employment, of a supervisory character, in factories and mills which said association proposes to establish in that country. The association was represented before the department by Mr. Edward D. Shank, director of finances, and Messrs. Soo Hoo Mee Tong, national president; Hom Hong, New York, president; Charles Boston, director; and Robert D. Moy, Chinese secretary.

The expressed intention of the Chinese Merchants' Association, in the event their application is finally granted by the department, is to delegate a representative or representatives to proceed to China for the purpose of making very careful selection of the young men who are to be brought to the United States for the purpose indicated. This accomplished and the requisite section 6 certificates, passports, etc., secured for the young men in question, they will be brought to the United States at the expense of the association, will, after arrival here, be enrolled in industrial schools to be selected, their expenses therein will be met by the association which will also look after their general welfare, and, upon the completion of their studies, which will include shop training in the schools which maintain shops, and in outside textile factories, without compensation, where the school at which the student is enrolled does not conduct a plant of its own, will return them to China, without expense to the Government of the United States, where it is proposed they will make use of the knowledge and practical experience gained while here in textile plants, etc., to be established there.

The proposition advanced by the Chinese Merchants' Association is quite different from some suggestions which have heretofore been made to the department in connection with proposals to bring to the United States Chinese "students" in large numbers, which proposals involved the admission of the "students" to acquire an academic education with permission to work in competition with American labor as a means of earning the money with which to pay their way through school. The primary purpose of the project advanced by the association is a thorough theoretical and practical education for the student, with a view to introducing American methods of manufacture in China; and the element of competition with American labor is eliminated and the basis laid for industrial development in China. The proposal does not contemplate the placing of the students at work for wages, for as far as they will labor with their hands at all it will evidently be merely as an incident to their schooling

and training and will be without compensation. In view of the obvious possibilities which seem to be inherent in the present proposition for increasing the friendly and commercial relations between the Republic of China and the United States, it has occurred to the department that the experiment proposed is well worth trying, provided the arrangement can be properly safeguarded. Accordingly, the permission sought by the association will be granted by the department, with the understanding and requirement that the following conditions are to be observed:

(1) A certificate, issued and visaed in exact conformity with section 6 of the Chinese-exclusion act of July 5, 1884, shall be required in the case of each student admitted hereunder.

(2) The Chinese Merchants' Association shall be required to furnish, on account of each student admitted, a bond in the penalty of \$1,000, conforming to the 9th proviso of section 3 of the immigration act, guaranteeing—

(a) That such student will be placed in an industrial school or institution (factory or plant) for training of the kind necessary to equip him for supervisory service later in a similar factory or plant in China.

(b) That such student will not be permitted while within the United States to engage in any employment for wages or in any other kind of work than that necessary to his industrial training as contemplated by the arrangement.

(c) That such student will be maintained and well cared for by the association in a manner appropriate to his efficient and expeditious training, and will, under no circumstances and to no degree whatsoever, be permitted to become a public charge within the United States.

(d) That such student will promptly upon the completion of his course of training in this country return to China, without expense or trouble to the United States, and that the period of his stay here shall be limited under the bond to three years from date of entry.

(3) That a memorandum (of either a formal or informal nature), approving generally of the plan of the Merchants' Association, shall be secured from the minister or chargé d'affaires of the Chinese Government at this capital and placed in the files of the Department of Labor.

(4) That when each student entering under the arrangement is admitted at a port of the United States his section 6 certificate shall be surrendered by him to the immigration officials and there shall be issued to him in lieu thereof a certificate of identity in accordance with Rule 19 of the Chinese Rules of the Department of Labor which shall be made clearly to show the particular purpose for which entry is being allowed and the temporary nature of the stay in this country contemplated.

(5) That on the 1st of January and the 1st of July of each year during which the arrangement remains in force the Chinese Merchants' Association shall submit to the Commissioner General of Immigration, Washington, D. C., a report showing the exact whereabouts of, and the nature and extent of the training then being received by each student theretofore admitted under this arrangement and still within the United States, and the whereabouts and occupation of each student who, after having been trained here, has returned to China.

The foregoing arrangement will be entered into by the department experimentally only, and the department reserves the right to cancel the arrangement at any time for reasons sufficient to itself. While during the period the students must necessarily remain here for the schooling and training contemplated, the department will not disturb those brought in under the arrangement even though it may become necessary to cancel the general arrangement, it will permit such students to remain here for the time contemplated by the agreement if they comply with the terms thereof, although the department will reserve the right to deport any Chinese brought in thereunder as students if they violate or refuse or fail to carry out the purpose for which admitted or violate the provisions of the exclusion laws or regulations. If it should appear that any violations of the Chinese-exclusion laws or regulations occur in connection with the operation of the arrangement the department may consider that fact alone sufficient cause for the immediate discontinuance of the arrangement, as well as for the deportation of the particular Chinese involved in the violation.

The principal object which the department has in mind in addressing you on this subject at the present time is that you may make a formal presentation thereof to the minister or chargé d'affaires of the Chinese Government at this capital with a view to ascertaining if it is his desire, as the representative in this country of the Government of China, to indorse the arrangement, as suggested in paragraph numbered (3) above. If the contemplated arrangement, meets with the approval of the minister and he furnishes you with a memorandum to that effect, the department will proceed to draft the necessary instruction to the immigration officials at the various ports

of entry with a view to putting it into actual operation. It will also be necessary of course, for your department at the proper time to instruct the various United States diplomatic and consular representatives in China with respect to the matter of visaing section 6 certificates for this class of Chinese students.

The real situation then appears to be that Chinese young men, ambitious to equip themselves to take an active and worthwhile part in the development of the new and industrial China may qualify themselves in the technical schools, and in the factories cooperating on half-time basis with schools of the United States, and be in a position to judge of the value of our machinery, of our tools and our methods in that development. In other words, wherever and whenever the labor performed is a part of the educational process, and not primarily for money to aid in an academic or cultural schooling, it will be treated as a part of the student's work. The question of payment for work in half-time or factory schools is in process of being worked out.

Labor Disturbances in the Italian Iron and Steel Industry.¹

Compiled by ALFRED MAYLANDER.

THE labor disturbances in the Italian iron and steel industry in recent months have attracted world-wide attention. Their importance, from a news standpoint, has been regarded as second only to that of the Russian revolution. Cable dispatches to the American press, while the disturbances were in progress, contained sensational reports that these disturbances were but the forerunner of a general revolution in Italy. It is true the disturbances among the iron and metal workers passed from an economic to a political phase and brought Italy to the threshold of a bloody upheaval. But owing to the neutrality of the Government and of the public the dispute was settled without bloodshed. The workers gained something they had not dreamed of winning six months ago, nor even at the beginning of the recent agitation. They gained joint control of their industry. And now public opinion has calmed down again in Italy. Aside from a few irreconcilables people generally have become accustomed to the idea as an accomplished fact. The mood now is one of curiosity as to the forms such industrial control is to take and the extent to which the same principles will be applied in other industries. An important period in Italian social history has closed. It can now be examined intelligently in historical retrospect.

Precedents of the Disturbance.

THE iron and steel workers' agitation was not the first of its kind since the armistice. It was one episode, merely, in a whole cycle of similar movements occasioned by the despondency and physical discomfort following the war, and especially by the high cost of living, which, in Italy of all the allied countries, presents itself in features especially grim and terrifying. It is in method of

¹ Compiled from various articles on the subject in August and September, 1920, issues of *Battaglie Sindacali* (organ of the Italian Federation of Labor), of Milan, *Giornale d'Italia* of Rome, *Il Secolo* and *Corriere della Sera*, both of Milan, and two articles in *The Survey*, New York (Oct. 2 and 30, 1920).

action rather than in substance that the peculiarity of the August-September struggle of the Italian iron and steel workers must be sought. That disturbance was not a strike; in its first phase it was obstructionism—"loafing on the job"; and in its second phase it was a seizure of factories with the corollary attempt to organize production and distribution on bases and with instrumentalities that were purely proletarian.

To be exact, not even these latter traits were entirely without precedent, the novelty consisting rather in the magnitude and power of the movement, involving as it did 300,000 workingmen in a basic industry centralized in the great cities of the north—Milan, Genoa, and Turin.

In the fall of 1919, when the issue was the 8-hour day and wage increase, the Dalmine factory at Bergamo was seized by the workers. Now the Dalmine workers were not Socialists; they were Nationalists. The seizure was inspired by the desire to correct an abuse "without reducing production so necessary to the nation." This first experiment was conducted by prowar laborers in the name of patriotism.

Early in the year 1920 the Mazzonis factories in Piedmont, the property of some old-style employers loyal to patriarchal notions of industrial management, were taken over by the workers—a seizure legitimized by the Government, which appointed a commission under the pretext that it should assist in making the enterprise successful. The issue here was whether Mazzoni Bros. should be made to conform to improvements granted by an employers' association they had refused to join. But this action of the Government was not determined by any clear or coherent policy; for, almost at the same time, the same ministry used troops to eject the workers from the Miani and Silvestri works in Naples, which had also been seized.

Last April the ironworkers of Turin started a fight for "shop councils" and went on a strike which became general throughout Piedmont. The shop councils did not long survive. They were decisively routed by the Manufacturers' League of Turin, which determined to resist them to the bitter end, requiring all its members to give heavy bond not to surrender.

The idea of the "shop council" came from the group supporting L'Ordine Nuova (The New Order), the Italian Socialist weekly. These men apparently wanted to create some proletarian organization in Italy to correspond to the Russian Soviet. They hit on the "inside-shop committee" (*commissione interna*) to be appointed "by all the workers, organized or not." In this institution they saw the germ of a new political system. The "shop council" is an outgrowth of the extreme Left in opposition to the existing federations, or syndicates, organized not shop by shop but trade by trade. This opposition led to a distinct coolness between the partisans of the new groups and the old federations, a coolness that was not the least effective cause of the failure of the strike in Piedmont, which was started by the Communists but then passed over to the General Federation of Labor to save. The strike for the "shop councils" was the preliminary stage of the unrest in the metal industries. The great movement of August-September, 1920, was the second.

The Italian Iron and Steel Industry.

THE capitalists interested in smelting and in metal working in Italy are not, as regards personal interest or moral and mental capacity, a united body. It is in the field of finance that a peculiar set of conditions has brought them to throw in their lots together. Both branches of the iron industry are protected by tariff, the smelters, however, to a far greater extent than the manufacturers of iron products. Both underwent phenomenal expansion during the war. In some cases capitalization of companies has leaped from 30 to 500 million lire (\$5,790,000 to \$96,500,000, par) and many secondary industries have been absorbed into single vast controlling organisms. Smelting is an artificial industry in a country like Italy where iron ore is not abundant and coal almost entirely lacking. On the other hand, the oversupply of cheap labor (at least up to the present) and a good supply of technical skill has made iron working a source of wealth.

The conflict of interests between the two sets of manufacturers is apparent. The iron goods manufacturers would be glad to get pig and ingots from Germany, France, or the United States as cheaply as possible. They have been paying 350 lire (\$67.55, par) for what was available in France for 250 (\$48.25, par), and for still less in Germany. The difference goes to the support of the Italian smelters.

Another point of cleavage: The smelting industry has only a domestic, protected market; whereas the iron working and machinery industries are exporting industries. Smelting is therefore preeminently a "political" industry; the enormous sums it spends in subsidies to newspapers to defend its protective tariff and its political "pull" are a subject of common scandal. Ironworking has not, on the other hand, had to depend on such methods to live and expand.

The manufacturers, furthermore, may be divided, as men, as personalities, into two groups. There are older business men who founded their enterprises before the war, solved the problems that then confronted them, met foreign competition squarely, trained a body of skilled labor, established technical schools, invented new processes, found new markets, and organized efficient salesmanship. Then there are "new men," manufacturers who started business during the war, and with a single customer—the Government—which was never inclined to split hairs, which never haggled over prices, especially when competition, foreign competition notably, had ceased, and when it was necessary to produce at whatever cost. These "new men" have plants that were built over night, were never well equipped, and have never developed efficient sales departments. In fact their enterprises grew up depending on the purchases of a state of war. Two classes of men, clearly a class of real business men, on the one hand—and such have little trouble in getting back to a peace footing—and a class of speculators, to use a word that may seem harsh, who answer an excess profits tax, for instance, by investing surplus in "fake" plants and in propaganda.

Now, what holds these conflicting interests together is a set of financial deals and intrigues on exchange on which it is not here in point to enter. It is relevant, however, to point out that the union of manufacturers is a union of varying temperaments and of minds

of differing mental and moral constitution. That will help to understand why the compact onslaught of labor was not met by an equally compact resistance from the manufacturers.

First Phase of the Struggle.

ABOUT the middle of June, 1920, the sporadic industrial disturbances in Italy, which by this time had become endemic, came to a head, and the storm burst. The upheaval started over purely economic differences. In pursuance of deliberations held on May 20 and 21, 1920, at a congress of representatives of the various unions affiliated with the Italian Federation of Metal Workers (*Federazione Italiana Operai Metallurgici*, shortly called F. I. O. M.), Bruno Buozzi, the secretary-general of this federation, in June addressed a memorial to the Employers' Association of the Metallurgical and Metalworking Industries (*Associazione Nazionale fra Industriali Meccanici Metallurgici ed Affini*) at Milan. The memorial contained such a large number of detailed economic demands that it can not be reproduced here verbatim. Suffice it to say that a very considerable increase of wages was demanded amounting on an average in the case of adult male workers to 7.20 lire (\$1.39, par) per 8-hour day and in that of women, apprentices and boys to about 50 per cent of the guaranteed minimum wages. The percental additions to the regular wage rates demanded for overtime work were 40 per cent for the first two hours after the normal 8-hour day, 60 per cent for the next 3 hours, and 100 per cent for any subsequent hours and for all work on Sundays and holidays. Night shifts were to receive an additional 30 per cent to the regular rates of pay. These wage demands were supplemented by demands for indemnification in case of layoffs, bonuses varying with the length of service in case of discharge, use of equipartisan labor exchanges in the hiring of help, traveling expenses, sustenance for workers employed at outside jobs in distant localities, etc. All these demands were to be incorporated in a collective agreement which was to become effective on July 1, 1920.

These demands were submitted by the F. I. O. M. to the Manufacturers' Association at a time when the manufacturers were flushed with their triumph over the "shop councils" and confident of a second easy victory. They knew the workers had spent all their money and were still quarreling over theory. They believed a strike could soon be broken, and felt sure, if not of the support, at least of the neutrality of the Government, which would protect their plants from violence. But the workers also knew they were not in a position to strike. So on meeting a flat refusal to increase wages by a single centesimo, they decided on obstructionism—"loafing on the job"—a device for suspending production without suspending wages.

This was a knockout blow to the manufacturers. A few days' trial in the factories showed that this so-called "white strike" was effective. The plants were running at a total loss. Suddenly, without warning, and breaking a pledge to the Manufacturers' Association, the Romeo factories in Milan closed their doors and posted a military guard. From that point Italy began to invent her new way of dealing with industrial welfare.

The Second Phase—Seizure of the Plants.

IN ANY other industrial country of western Europe the two sides would have settled down to a trial of economic strength, the workers under the constant menace of starvation, fighting with both hands tied behind their backs, the employers comfortably entrenched behind a bank account and all the forces of law and order. Not so in Italy. The closing of the Romeo factories in Milan was the signal for action by the workers. The F. I. O. M. replied to the lockout by ordering its members to occupy the factories and to organize and carry on production themselves. The workers obeyed these instructions with promptitude, unanimity, and good discipline. In Milan, Turin, Rome, Bologna, Genoa, and, indeed, all the chief manufacturing towns, the men rushed into the factories involved in the dispute, sent the owners home, placed armed guards around the shops, seized all the arms in sight (many of the factories were for war materials), threw up wire entanglements to keep off eventual attacks, ran up the red flag over the buildings, and proceeded to organize the work themselves. Not only were the iron and steel works seized but also those for raw materials. The movement was spreading to the textile mills before the labor councils (*Camere di Lavoro*) got the rank and file under control again. Instead of the planned general lockout by the employers, what did happen in Italy was simply a sudden, systematic, and obviously illegal "lock-in" or forcible occupation of all steel factories and mills and allied industries on the part of the workers.

This embryonic revolution was accomplished with scarcely any disturbance or bloodshed. The employers did not resist, and the Government did not intervene. There is little doubt that at first both the employers and the Government expected that this new move of the F. I. O. M. would fail immediately in face of the immense difficulties confronting the workers. But this calculation proved to be wrong. The difficulties were, indeed, enormous. Where, in the first place, were the workers in revolt against capitalism and the capitalists to procure the new materials without which they could not continue production? What were they to do when the engineers and management, as they nearly always do, took sides with the employers? How, in the sudden excitement of the captures and the semirevolution, in the feverish uncertainty of what would be the next move of employers and Government, could they hope to maintain in the works that orderly discipline without which large scale production is impossible? Yet somehow or other the F. I. O. M., helped by the General Federation of Trade-Unions, overcame these difficulties. In most of the works the men were armed with rifles and machine guns and a severe military discipline was maintained. The railwaymen, acting under orders from the General Federation, wherever possible, seized raw materials and consigned them to such factories as were in urgent need of them. The Federation succeeded in organizing a service to help those factories which were in difficulties owing to the withdrawal of the higher technical and administrative staffs. The movement did not collapse; on the contrary, it grew, and every day brought news of the occupation of more factories.

Workers Demand a Share in the Control of the Industries.

THEN this unique struggle began to assume a new aspect. At the beginning of the trouble the Government had pursued the normal routine of attempting to arrange a settlement. The workers' economic condition was admittedly bad. It must be kept in mind, first, that before the World War the wages of Italian iron and steel and metal workers were very much lower than those of the same class of workers in the other entente countries and also that the increase of 250 per cent in Italian wages since the war, paid in the greatly depreciated Italian currency, does not correspond to an increase in other countries of 200 or even 150 per cent. Secondly, it must be considered that the cost of living in Italy has risen in a much greater measure than in the other entente countries and thus, even if the depreciation of the Italian lira is not taken into account, the former difference in wages of Italian iron and steel and metal workers as compared with those of the same class of workers in other countries has not only not been wiped out but rather become more pronounced. The Government therefore made proposals to the employers for the granting of concessions and ameliorations. These proposals, however, found no acceptance. When the seizure of the factories began, the employers became still more obstinate, and confined themselves to a flat refusal of all negotiations until their property was restored to them. The workers now, not unnaturally, shifted their position; their original demand for increased wages, etc., was changed to one for a permanent share in the control of the industry.

The National Labor Conference at Milan.

THE situation had developed until it now concerned not merely the iron, steel, and metal workers but the whole of Italian labor and a national labor conference was convened by the General Federation of Labor to be held at Milan on September 11. This mammoth meeting, at which all the workers' organizations of Italy were represented, took under consideration the industrial upheaval created by the "lock-in" of the metal workers. The Socialist Deputy D'Aragona presented a resolution in the name of the General Federation of Labor favoring a compromise. This was adopted by a majority of 200,000 votes. The total representation present was 1,094,000. A Maximalist resolution presented by Deputy Ducco, in behalf of the Socialist Party was defeated. It had the support of the Tuscan cooperative workmen, whose organization only lately joined the Socialists and is highly radical.

D'Aragona's resolution, which was supported by the great federations of peasants and textile workers in all centers where the cooperatives flourish, as at Bologna, Ravenna, Mantua, and Ferrara, says that the dispute of the metal workers can not be solved now by simply settling the differences which arose when the dispute began, and declares:

To-day's historical moment renders impossible hereafter the present relations between masters and workmen, determines that the further direction of the movement be taken over by the General Federation of Labor with the assistance of the Socialist Party, and that the aim of the struggle be an acknowledgment on the part of the masters of the principle that their works shall be controlled by the workers' union.

The adoption of D'Aragona's resolution was preceded by a stormy discussion in which the efforts of Deputy Modigliani to bring about an understanding or a compromise between the Maximalists and the General Federation of Labor failed, although he outlined what a deplorable effect discord between the leaders of the two factions would have on the masses. At one time the tumult was so great that some of the delegates were obliged to intervene to prevent a fight, particularly when Signor Gennari attacked D'Aragona and the Federation of Labor, declaring that the organization's attitude was an attempt to crush the direction of the Socialist Party. Gennari maintained that the conflict had now assumed an entirely political character so that only those in charge of the Socialist Party had a right to lead in the movement, according to the principles confirmed at the last congress of the Third International—communism with a proletariat dictatorship and the proclamation of a Soviet Republic.

Deputy D'Aragona declared that according to the view of the Federation of Labor "the soviet system can not be transplanted into Italy, especially at the present moment when it would mean famine and ruin." The Italian masses were not ripe for a decisive experiment. He continued:

Let me speak to you frankly. Voting the resolution of the Federation of Labor means acceptance of a program of action, slow but sure, not conflicting with the conquests of civilization and leading ultimately to the acquisition of all your rights, without too violent shocks.

Instead, in approving Gennari's resolution you would certainly give proof of your Socialist conviction. But, mark my words, in so doing you vote for the entry into the field of the entire proletariat against the bourgeois system. It is permitted to doubt the result of such a great battle. It is possible that defeat would mean the destruction of our whole patient, tenacious work for the workmen's emancipation, which covers a period of a dozen years. My conscience as an honest man and a Socialist is satisfied by presenting to you two solutions: Choose! If the opposition resolution passes the members of the Federation of Labor are ready to sacrifice their opinion after the assembly has demonstrated that their program does not correspond to the aims of the proletariat.

The overwhelming vote in favor of D'Aragona's resolution was received with a hurricane of applause and shouts, in which the opposition also joined, Gennari being one of the first to congratulate D'Aragona.

The General Federation of Labor immediately after the vote in favor of its resolution took charge of the movement and formulated the workers' demands. It restated the necessity for raising the workers' standard of living and then proceeded to demand that the workers "should be given the right to learn the real state of industries and their technical and financial working, and through works councils emanating from the trade-unions should take part in the application of regulations, control employment and dismissal, etc." Finally the Federation asked for the immediate appointment of a commission representing workers and employers, which should work out the methods of applying these principles.

Intervention of the Government.

UP TO this point the Government had refused to allow the issue to be transported to the ground of legal precedent and had steadfastly remained neutral. Signor Labriola, the Minister of Labor,

on September 7 had publicly and clearly explained the Government's position. It had made, he said, proposals to the employers which it considered fair, and which had been refused. It was a fact that the workers had seized the factories, but the Government would not intervene to eject them. Ejection was impossible without bloodshed, and the Government was determined to avoid bloodshed. The Government accepted the workers' statement that their object was not a communist revolution but a legitimate amelioration of their position in industry. This attitude of the Italian Government is unique in the history of big struggles between capital and labor. It was followed by a still more dramatic move as soon as the General Federation of Labor formulated its demands. Then at last the Government intervened in the person of the prime minister himself. After hearing both sides, Signor Giolitti, the Italian premier, announced that the Government supported labor's demand for a share in the control of industry, and, when the employers still showed signs of obduracy, he presented them with an ultimatum. If they refused to take part in a commission to work out the methods of applying the principle, the Government would secure the passage of a bill doing by law what they refused to do themselves.

Settlement of the Struggle.

AFTER several preliminary meetings with the prime minister, representatives of the two parties to the struggle met on the evening of Sunday, September 19, in the ministerial council chamber in Rome for a final settlement of the dispute. The workers were represented by Deputy D'Aragona; Baldesi, of the General Federation of Labor; Colombino, Marchiaro, Raineri, and Missiroli, of the F. I. O. M. The senators Conti and Crespi, Signor Olivetti, the secretary of the Federation of Industrial Employers (*Federazione Generale dell' Industria*), and the manufacturers Pirelli, Ichino, and Falk represented the employers. The Government was represented by Premier Giolitti, who presided over the conference, and by the prefects of Milan and Turin.

The employers' representatives came to the conference prepared to grant nearly all the economic demands of the workers, but at the same time they were firmly resolved to save at least their honor in this struggle which had such disastrous results for them. They obdurately refused to relinquish their disciplinary powers over their employees with respect to dismissal, imposition of fines, etc., and would not consent to assuming the obligation of reinstating all their former personnel and to paying wages for the periods of obstructionism and seizure of their plants. However, the workers' representatives were equally obdurate and laid special stress on the acceptance by the employers of those conditions that were most objectionable to the latter. The employers' representatives tried for hours to obtain some concessions from the representatives of the workers but failed entirely. The workers having been victorious in the struggle and the Government leaning to their side in the controversy, the employers were finally forced to capitulate.

In the protocol finally drawn up and signed the original economic demands of the workers were granted either partly or fully. The appointment of an equipartisan commission of employers' and work-

ers' representatives which should draft a bill giving the workers a share in the technical and financial control of the establishments was also agreed upon. The employers stated, however, in the protocol that they would submit to full reinstatement of the former personnel only under protest and compulsion for which the Government must assume responsibility. Signor Giolitti, the premier, declared that he would assume full responsibility and before the close of the conference issued and signed a decree providing for the appointment of the aforementioned equipartisan commission and for the reinstatement of the entire personnel of the establishments involved in the struggle.

Conditions of the Settlement.

BRIEFLY summarized the conditions agreed upon for settling the dispute were the following:

Wage increases.—An increase of 4 lire (77.2 cents, par) per day to male workers over 20 years of age; of 3.20 lire (61.8 cents, par) to male workers between 18 and 20 years of age, and to female workers over 20 years of age; of 2.40 lire (46.3 cents, par) to male workers between 15 and 18 years, and to female workers under 20 years of age. The staffs of small works—not employing more than 75 workers—are to receive 80 per cent of the above increases. The said increases are to apply to all districts of Italy with the exception of the district of Venezia Giulia (the parts of Austria on the Adriatic Sea ceded to Italy) and are to be apportioned among the various component parts of the pay of the workers (basic wages, cost-of-living bonus, piece-work bonus, etc.) in a manner to be determined regionally and locally and subject to deductions for increases granted after May 15, 1920. A special commission shall decide whether deduction shall be made from cost-of-living bonuses granted after May 15, 1920. These increases are to take effect as from July 15, 1920.

Annual leave.—Workmen with at least 12 months' service in the works in which they are employed will be granted 6 working days' (48 hours) leave with pay and cost-of-living allowance. The period during which this leave will be granted is to be fixed by common agreement and in accordance with the exigencies of the work.

Bonus on discharge.—No worker with less than 3 years' uninterrupted service in the establishment in which he is employed shall be entitled to a gratuity on his discharge. After 3 years' service each worker discharged for other than disciplinary reasons shall be entitled by way of gratuity to 2 days' (16 hours') pay for each year of service, in addition to the statutory notice. Workers now in the service of an establishment shall, when they leave voluntarily, be considered as having been in the service a maximum period of 10 years.

Cost-of-living bonus.—In all regions of Italy a part of the pay shall be considered a cost-of-living allowance subject to variations (increase or decrease) which shall be determined in per cent in accordance with the actual cost of living.

Pay for the period of obstructionism.—The question of pay for the period of agitation has been settled by making the increase in pay retroactive to July 15, 1920. In addition, the workers will be paid for the period of obstructionism but not for that of occupation of the plants.

Decree of the Prime Minister.

THE above-mentioned decree issued by the prime minister, Signor Giolitti, has the following text:

Whereas the General Federation of Labor has formulated the demand that the existing relations between industrial employers and workers should be modified in a manner giving the latter through their trade-unions the possibility of exercising a control over the industries, and has stated that the motive of this demand is that it is its purpose through such control to bring about an improvement in the disciplinary relations between employers and workers and an increase in production on which at the present time depends the economic rehabilitation of the country; and

Whereas the General Federation of Industrial Employers on its part is not opposed to making the experiment of introducing a control in the various industry groups for the above purpose;

The President of the Council of Ministers takes cognizance of this agreement, and decrees:

There shall be established an equipartisan commission composed of six members nominated by the General Federation of Industrial Employers and six nominated by the General Federation of Labor, including on each side two technicians or salaried employees, which commission shall formulate such proposals as may be of service to the Government in submitting a bill with the object of organizing the industries on the basis of participation of the workers in the technical and financial control of the administration of the establishments.

The said commission shall within one week draw up rules for the settlement of all questions which may arise concerning the observance of shop regulations and the engagement and dismissal of labor.

The personnel shall resume its positions. When, however, the presence in the same department or establishment of workers or their superiors is found to be incompatible, a commission composed of two members appointed by the employers and of two appointed by the workers shall decide what measures are to be taken.

Conclusion.

EMPLOYERS' and workers' representatives are now engaged in establishing a system of control in industry to which the Government proposes to give legal sanction. The deep significance of the Italian disturbance lies in the attitude of the Government throughout. For whether the present agreement between capital and labor as to joint control of production proves permanent or not, the principle that public policy is superior to any private dictatorship or control of essential production has entered into the Italian national consciousness. Italy has set out on an experiment.

There were indeed indications long ago that something of the kind might happen in Italy, where there is no large middle class to act as a solid buttress of the big employers. No one who read the programs of the various Italian parties at the time of the elections last November could fail to note how even the conservative parties were pledging themselves to methods of industrial reconstruction which in the United States, in France, and Great Britain would be regarded as almost revolutionary. The redemption of these political promises is now being demanded, and Italy is now attempting to do what radical Socialists hold to be impossible—to reform the capitalist system.

The Labor Situation in China.¹

By TA CHEN, M. A., UNIVERSITY FELLOW IN SOCIOLOGY AT COLUMBIA UNIVERSITY.

The Awakening of Labor.

JUDGING from the searching interest in the labor situation manifested in recent Chinese publications, the increased and increasing cost of living—a by-product of the World War—directly affects the Chinese worker. The price of rice, for example, in the course of the last two years, has increased nearly 90 per cent. On the other hand, the slow increase in wages does not keep pace with the rapid rise in the cost of living. Four years ago, the unskilled laborer was content with a monthly wage of from \$7 to \$10,² as in the printing industry of Shanghai. To-day he often gets \$15. Even with the present wage, he finds it difficult to support a family, as the family budget is ever expanding. In view of this fact, the Chinese worker resorts to some devices, which have been found useful by his comrades in the west, toward a partial realization of what may be termed “industrial democracy,” or just a necessity to appease hunger. Among other things, strikes are much in vogue. The most successful one was the Hongkong strike, from March 31 to April 20, 1920, when more than 9,000 employees in the rice and sugar refining industries, and of telephone, telegraph, dockyard, street railway, and express companies walked out with a demand for a uniform wage increase of 40 per cent. After a complete paralysis of industries in town, the employers reluctantly granted an increase of 32.5 per cent for annual wages below \$100, and of 20 per cent for those above \$100.

Again, the recent student movement gives the Chinese workingman a new impetus. When the Versailles treaty transferred to Japan the treaty and property rights of Germany in Shantung, students in China organized the “Students Union” to voice a nation-wide protest. They formed the “Ten-Man Squads” to speak to the masses on patriotism as well as on the industrial development of the country. Now, more than ever before, the worker is familiar with such terms as “fair wages,” “short hours,” and “dignity of labor.” He now insists on having a wage not barely to keep his body and soul together, but with a little surplus for Saturday evening movies.

Then, too, when industries in the west were temporarily dislocated by the great war, some nations found it necessary to import commodities from China. Such, for instance, was the case of the United States Shipping Board Emergency Fleet Corporation, which ordered four standard freighters each of not less than 10,000 tons dead-weight from the Kiangnan Dock, near Shanghai. That meant demand for more labor at home. Indeed, labor shortage was so keenly felt in some cities that one of the Shanghai factories had to recruit women workers from the Province of Hunan, on the Yangtse River.

¹ The data herein presented are chiefly based on the labor number of *La Jeunesse* (published in Chinese), May, 1920. This Chinese monthly has apparently made the first sincere attempt comprehensively to survey the labor situation in China. Recent issues of the *Journal of Commerce* (in Chinese), *Far Eastern Review*, *North China Herald*, and *Millard's Review*, all Shanghai publications, have also been consulted.

² In all references to the dollar, the Mexican dollar is meant. In normal exchange 1 Mexican dollar is worth 49.9 cents. That was the prewar exchange rate. But to-day silver is very high and the exchange rate is about 90 cents, gold.

Moreover, with the boycott of Japanese goods the patriotic movement also has led to the development of home industries. "The textile industry is booming," says one manufacturer. And another asserts, "We must manufacture our own goods to displace Japanese merchandise." During the last six months alone, many advance contracts have been made between certain companies in the United States and Chinese cotton merchants. The latter have bought American cotton manufacturing machinery to the value of not less than \$1,500,000 gold. The Chinese Cotton Mill Owners' Association now operates 17 cotton experiment stations in 7 Provinces. The rapid development of industries calls for a larger supply of labor. Therefore, labor is coming to a waking consciousness. It is now articulate. Thus, in response to a recent investigation of Chinese labor conducted by *La Jeunesse*, a Chinese monthly of militant thought, many workers enthusiastically gave detailed information descriptive of their respective industries.

Types of Labor Organizations.

ALTHOUGH national labor organization, as the term is understood in the United States, is just making its appearance in China, local organizations for the welfare of the worker are numerous. These organizations are of two types—antiquated and modern. The native organization, little influenced by foreigners, is of long existence. On the farms, the laborers usually form into small groups of anywhere from 25 to 100 men, under the direction of a "headman" and his assistants. When labor is needed, the employer makes a contract with the headman, who sends him workers for the job. The headman collects bills and divides gross receipts with his men on an agreed ratio, which varies in various communities. As the headman usually knows local conditions well, his information on employment and labor is accurate. In the absence of labor employment bureaus, such as exist in the United States, this organization, though antiquated, is highly useful for lessening unemployment in seasonal labor such as agriculture. In trades, apprenticeship is still in practice in many industries. When a youth wants to learn a trade he goes to his master who furnishes him food and lodging. The apprentice lives there and works for the master for three or more years. During this period he gets a nominal pay or perhaps none. The masters in a particular industry organize the guild, which by its elective officers looks after the welfare of that industry. The apprentice may be initiated to become a member of the guild, when the term of apprenticeship expires.

Labor organization on a modern basis is of recent growth. Before the revolution of 1911, the railway workers, miners, and cement employees of Tangshan, Province of Chili, numbered more than 6,000. Prompted by gregarious instinct and perhaps animated by a desire for self-elevation they established a general meeting place for reading purposes and amusements. Then the revolution came. Enthusiastic workers saw urgent need for a closer organization to meet new conditions. The Tangshan Labor Union, composed of some 800 members, was then formed. For a time it wished to affiliate itself with the Labor Party of Shanghai, which intended to be a national organi-

zation. Failing in the attempt, the Tangshan Labor Union resolved to devote its entire energy to the welfare of the workingmen in the community. Among other things, it provided for a reading room, a monthly publication devoted to labor and industrial problems, evening classes for the workers, and a lecture group on sanitation, health, and personal hygiene. Unfortunately political and social unrest in recent years have shaken the foundation of the organization, and the union has undergone reorganization several times.

Still newer types of labor organizations are the Progressive National Labor Union and the Chinese Returned Laborers Union. Both absolutely refuse to have anything to do with politics. They set out to achieve two main things—the education of the worker and the increase of wages. Unlike the other labor organizations, they are not involved in the student movement, nor do they show sympathy in the agitations by merchants in many cities. Their chief aim is to gain mutual aid among the workers; and this, they believe, can be obtained only through educational uplift of the working class. So far as we can judge, they are neither socialistic nor unintelligently radical.

Labor in Some Chinese Industries.

WHILE the textile industry seems to be somewhat slacking just now, it is making remarkably rapid progress in China. In Shanghai alone there are now 33 Chinese and foreign-owned cotton mills of large size, with a total equipment of about 1,200,000 spindles. Nine of them were established since the boycott of Japanese goods. The total number of employees is about 90,000. Here the discussion will be confined to the labor situation in certain selected Chinese mills. Twelve hours seems to constitute the working day, except in the case of weavers and sewers, whose working hours are $13\frac{1}{2}$ and 14, respectively. Wages vary greatly with the nature of employment, and it is misleading to generalize. Forming an estimate based on average conditions, it may be said that the daily wage for foremen is about 75 cents (Mexican); for common laborers, 40 to 55 cents; for children, 20 cents; for forewomen, 50 cents; and for female workers, 30 cents. Besides timework, piecework and "contract-labor" systems are also practiced. Contract labor is mainly used to relieve the mill from too much congestion. For example, if some special job needs to be done at short notice the mill contracts with outside laborers to have it done within a limited time. In that case the force of the mill is elastic, its size depending largely upon whether or not the mill is busy.

The scale of wages seems incredibly low. But it must be borne in mind that the cost of living in China is much lower than in the United States, though how much lower can not be definitely stated, since data are not available for an accurate estimate. To illustrate, 20 cents will buy more rice there than in this country. Therefore, we can not think of Chinese wages in terms of American wages.

In the printing industry of Shanghai there are about 10,000 workers. The leading establishments are the Commercial Press and the Chung Hua Book Co., both under the exclusive management of the Chinese. The monthly wages of the employees may be roughly classified as follows: For foremen, \$20 to \$50 (Mexican); for common

laborers, \$10 to \$30; for the apprentices, \$1 to \$10. Women are employed chiefly in the binding departments. They are paid on a piecework basis. Nine hours forms the working day for both men and women, except in times of rushing business when night work is necessary. In such periods the employees must work from one to three hours overtime with extra pay.

Education and Welfare of the Workers.

ONE sign of the conciliation and cooperation between capital and labor in China is the whole-hearted effort on the part of employers to promote the welfare of the workers. This is little to be wondered at, for in a social system such as the Chinese have humanism is highly developed and the craze for money at a human sacrifice is scorned by many, educated and uneducated alike.

Among the meritorious acts of the Commercial Press, the following deserve special mention: (a) A free clinic for all the employees; (b) a system of compensation for accidents and deaths occurring in the course of employment; (c) evening classes for the benefit of the workingmen; (d) with regard to women workers, a vacation of one month before the birth of a child and of one month after, with a sum of money for midwifery, etc.; (e) a kindergarten for the children of the employees; (f) a special training school for the children of the employees. Twenty children may be admitted each year, free of all charges, and 60 children may be admitted each year by paying one-half of all the necessary expenses.

The Yang-shih-poo Settlement, in the center of industrial Shanghai, is the Hull House of China. The institution, supported by the factories in the neighborhood and supervised by Dr. Webster, of the Shanghai Baptist College, is entirely managed by the Chinese. Games and sports of many kinds are accessible to the workingman. Here he is also welcomed to verify the validity of a recent Chinese invention—the simplified Chinese language. When the factory closes one can see the stream of factory workers pouring into the settlement for physical exercise and intellectual enlightenment.

Instances of this nature may be multiplied. It may be sufficient, however, to cite one more, which is different in character but similar in principle. Mr. C. C. Nieh, one of the pioneers of China's cotton industry, an experienced business man and a serious student of modern industrial problems, regards the Taylor system as a pragmatic remedy for the capital-labor malady, and consequently applies scientific management to one of his largest mills, Heng Fong, of Shanghai. This mill has an equipment of about 65,000 spindles and a force of 1,500 employees. With some modifications to suit local needs, the system is said to be very successful. Besides the efficiency methods based on the "time and motion study of the task," Mr. Nieh treats his employees with sympathetic kindness, so that his men feel a high sense of loyalty to the factory and to the employer. If it be argued that the pseudo-paternal attitude such as Mr. Nieh assumes toward the worker is likely to arouse resentment on the part of the employee (as it does to some extent in the United States), it must be pointed out that Chinese labor, yet largely unorganized, lacks strength in collective bargaining and consequently feels little

diffidence at accepting favors from its employer. Fairness in wages and conditions of employment will have to come, for the time being at least, through the broad vision of the capitalist. The considerate employer can do much to relieve the hardships and in some cases utter helplessness of the coolie, who is traditionally called the "bitter soiler."

Woman Workers.

CHINESE women are beginning to enter industries. Aside from domestic service to which they are peculiarly adapted, the Chinese women find employment in many industries. The Nanyang Bros., a big tobacco concern, is said to have in its employ the largest number of women—about 2,500. Very recently many female workers have secured positions in an American company for manufacturing electric bulbs in the city of Shanghai. This is probably the newest industry to use woman employees. Although the women's working hours are generally the same as those for men workers, they invariably receive lower pay. This prejudice or discrimination against women is dying out fast in this country, but it will likely persist for some time to come in a young democracy such as the Chinese Republic.

The Outlook.

IT IS not safe to prophesy. All that may be done by way of forecast is to indicate certain tendencies more or less clearly manifested in the immediate past. One thing about which a reasonable certainty exists is the strong desire of Chinese labor to organize on a broader basis. Recent strikes in various cities brought home to the worker the futility of individual bargaining and the inadequacy of small local unions. Chinese labor will unequivocally strive for higher wages and shorter hours. This tendency is already manifest in many industries.

Entrance of women into industries will gradually assure their economic independence. This is encouraging. But, with the emancipation of women, the clan-family system will soon break down. The old-fashioned Chinese home now appears dull to certain classes of women as compared with the hustling and bustling of the factory. While industry has lured many American women away from the kitchen, in China the change lies in the refusal of the housewife to live under the same roof with her aunts and sisters-in-law. Similarly, the Chinese marriage system is undergoing a momentous change. Contrasted with the old practice of arranging marriage through parents, the young woman of to-day insists on the "freedom of marriage"—the right to choose a husband voluntarily. These intricate social problems, arising from a quasi-industrial revolution, are ever increasing.

Lastly, the immediate elevation of the laborer will temporarily depend upon the efforts of the capitalist. For some time to come the illiterate worker will not be able to struggle advantageously with the better organized employer. The employer, on the other hand, can not ruthlessly enslave the employee, for the temperament of the Chinese social composition is strongly antagonistic to capitalistic exploitation at the expense of the "human machine." As matters

now stand, the Chinese social mind, rather forcibly expressed through the press, will in a large measure force the employer to take a conciliatory attitude toward the worker long before the capital-labor struggle gets to a complicated stage.

Chinese and Japanese Labor in Oregon.

ADVANCE figures furnished this Bureau by the Bureau of Labor Statistics and Inspector of Factories and Workshops of Oregon give by counties the number of Chinese and Japanese in that State, their average wages per day and year, and the amount and value of property owned by them. The table below shows the distribution of the two nationalities by sex.

DISTRIBUTION OF CHINESE AND JAPANESE IN OREGON, BY SEX.

Nationality.	Adults.		Children.	Total.
	Male.	Female.		
Chinese.....	2,953	245	419	3,617
Japanese.....	2,666	883	998	4,547
Total.....	5,619	1,128	1,417	8,164

Of the Chinese, 203, or only about 6 per cent, were married, as compared with 836, or nearly one-fourth of the Japanese. During the year 1919, 34 Chinese children and 200 Japanese children were born.

The number of wage earners of each nationality is shown by sex and kind of employment in the following table:

NUMBER OF CHINESE AND JAPANESE WAGE EARNERS IN OREGON, BY KIND OF WORK AND SEX.

Kind of work.	Wage earners.			
	Chinese.		Japanese.	
	Males.	Females.	Males.	Females.
Commercial pursuits.....	308	67	202	63
Industrial pursuits.....	1,784	.....	1,595	.....
Agricultural pursuits.....	181	.....	590	1
Total.....	2,273	67	2,387	64

The table shows that while the majority of the wage earners of both nationalities are engaged in industrial pursuits, a much larger proportion of the Japanese than of the Chinese are agricultural workers, 25 per cent of the former as against 8 per cent of the latter being so employed. On the other hand, a larger proportion of the Chinese than of the Japanese are engaged in commercial pursuits.

In the various counties the average daily wages and the average yearly incomes of the Chinese are usually about 20 per cent less than

those of the Japanese. Thus the average daily wages of Japanese males range from \$3.40 to \$5, the prevailing wages being from \$3.60 to \$4.25, and the average yearly income from \$800 to \$1,250. Japanese females receive from \$2 to \$2.75 a day and from \$600 to \$750 a year. Chinese males receive from \$2.75 to \$4.50 a day, the prevailing wages being \$3.75 or \$4, and from \$600 to \$1,000 a year; Chinese females receive from \$1.50 to \$2 a day and from \$450 to \$550 a year.

Data received as to the proportionate consumption of foreign and domestic products show that in the several counties from 5 to 40 per cent of the goods used by the Chinese are of foreign origin and from 60 to 95 per cent are of domestic origin. American rice and clothing are among the things now bought by the Chinese. The Chinese in three counties bought no foreign goods whatever. Of the amounts spent by the Japanese from 8 to 40 per cent went for foreign products and from 60 to 92 per cent for domestic goods. Six years ago the Japanese bought only from 30 to 35 per cent of goods of domestic manufacture. The increase in consumption of domestic products is ascribed not to preference for American products but to the fact that the war stopped the import of foreign goods and consequently these goods could not be obtained.

The average yearly rent paid by the Chinese was found to range, among the various counties, from \$120 to \$375; that paid by the Japanese from \$120 to \$450.

The advance report shows that Chinese hold 139 pieces of city property, the assessed value of which, including ground and improvements, was \$57,372, and land aggregating 2,540 acres, assessed at \$70,650. The Japanese hold 111 pieces of city property valued at \$25,916 and land amounting to 4,702 acres and valued at \$142,255.

CURRENT NOTES OF INTEREST TO LABOR.

Changes in Personnel of Washington State Industrial Welfare Commission.

LETTERS (Oct. 11 and 27) from the chairman of the Washington Industrial Welfare Commission state that owing to recent resignations, three new members and a secretary have been appointed, so that the present personnel is as follows: Hon. C. H. Younger, chairman; Mrs. Mary Hardison (new appointment); Mrs. D. M. Johnson (new appointment); Mrs. Guy K. Lewellyn (new appointment); Mrs. Lucy E. Redpath; and Mrs. Lenore M. Raeder, secretary (new appointment).

Cotton-Mill Workers for Canada.¹

ABOUT 80 Lancashire cotton operatives, consisting of 30 men and 50 women and girls and a few children, recently departed for Canada to accept employment in a new cotton mill being started at Verdun, Canada.

The factory, which has been equipped with spinning and weaving machinery bought in this country, is said to have been recently acquired from the British Munitions Co. A start is being made with about 500 looms and 80,000 spindles. The operatives selected are of Lancashire type, and it is said the firm obtained over 400 applications as a result of their advertisement and were thus able to make a careful selection. The party consists of weavers, spinners, ring spinners, card-room workers, and other factory operatives.

Decision of International Typographical Union with Reference to Revoking Membership Cards.²

AT THE Sixty-fifth Annual Convention of the International Typographical Union of America, which was held in Albany, N. Y., August 9 to 11, 1920, the proposal "to revoke the card of any member obtaining employment in an open shop" was turned down by a vote of 171 to 79.

¹ From consular report submitted under date of Oct. 20, by United States consul at Manchester, England.

² The Typographical Journal, October, 1920, p. 409, Indianapolis.

Labor Notes from Paraguay.³

AN EMPLOYMENT office has just been established by the Naval Federation of Paraguay. Contractors, shippers, owners of hotels and restaurants, etc., can obtain help at prevailing wages. The employment office has a reading room with local and foreign publications on file.

The Compañia Argentina de Navegacion (Nicolas Mihanovich Ltda.) has given an increase of 33 per cent to all pursers on the steamers plying on the Paraguay River.

The employees of the Central Post Office station in Asunción have organized a mutual benefit aid society for the purpose of protecting its members in case of sickness and accidents.

An attempt is being made to unite those waiters and cooks serving on the river and those serving in the restaurants and in the hotels for the mutual benefit of all.

Rapid progress is being made in the work to unite all the labor organizations of the country into one general federation. The movement has been joined by the Centro Obrero Regional (syndicalist), tinsmiths, painters, carpenters, and maritime workers.

³ From Monthly Report on Commerce and Industries of Paraguay for the month of July, 1920, forwarded to Department of State by the American consul at Asunción under date of Sept. 8.

IMMIGRATION AND EMIGRATION.

Monthly Movement of Aliens, January, 1913, to July, 1920.

THE following tables, prepared by the Bureau of Immigration of the Department of Labor, show the total number of aliens admitted into the United States in each month from January, 1913, to July, 1920, and the number of aliens who were admitted and who have departed in each month from January to July, 1920, by nationality or race. There are also shown the numbers admitted during the seven months from January to July, 1920, distributed by States in which they have taken up their residence.

ALIENS ADMITTED INTO THE UNITED STATES IN EACH MONTH, JANUARY, 1913, TO JULY, 1920.

Month.	1913	1914	1915	1916	1917	1918	1919	1920	
								Num-ber.	Per cent increase over pre- ceding month.
January.....	46,441	44,708	15,481	17,293	24,745	6,356	9,852	31,858	16.0
February.....	59,156	46,873	13,873	24,710	19,238	7,388	10,586	30,606	13.9
March.....	96,958	92,621	19,263	27,586	15,512	6,510	14,105	39,971	30.6
April.....	136,371	119,885	24,532	30,560	20,523	9,541	16,860	48,219	20.6
May.....	137,262	107,796	26,069	31,021	10,487	15,217	15,093	53,772	11.5
June.....	176,261	71,728	22,598	30,764	11,095	14,247	17,987	62,692	14.9
July.....	138,244	60,377	21,504	25,035	9,367	7,780	18,152	62,832	.2
August.....	126,180	37,706	21,949	29,975	10,047	7,862	20,597	.....	.....
September.....	136,247	29,143	24,513	36,398	9,228	9,997	26,584	.....	.....
October.....	134,440	30,416	25,450	37,056	9,284	11,771	32,418	.....	.....
November.....	104,671	26,298	24,545	34,437	6,446	8,499	27,219	.....	.....
December.....	195,387	20,944	18,901	30,902	6,987	10,748	37,913	.....	.....

¹ Decrease.

Classified by nationality, the numbers of aliens who were admitted and who departed in each month from January to July, 1920, were as follows:

NUMBER OF ALIENS WHO WERE ADMITTED AND NUMBER WHO DEPARTED IN EACH MONTH, JANUARY TO JULY, 1920, BY RACES.

Admitted.

Race or people.	Janu-ary.	Febru-ary.	March.	April.	May.	June.	July.	Total.
African (black).....	486	314	506	651	1,138	1,214	1,079	5,388
Armenian.....	178	174	105	353	366	1,026	556	2,758
Bohemian and Moravian.....	11	14	16	26	78	94	134	373
Bulgarian, Serbian, and Montenegrin.....	53	95	130	121	133	203	333	1,068
Chinese.....	158	145	118	197	205	159	171	1,153
Croatian and Slovenian.....	10	21	63	50	63	207	218	632
Cuban.....	35	16	38	68	146	140	214	657
Dalmatian, Bosnian, and Herzego- vinian.....	.....	3	.....	2	28	15	36	84
Dutch and Flemish.....	898	845	950	1,089	2,213	2,042	1,568	9,605
East Indian.....	11	5	12	14	8	19	24	93
English.....	3,453	3,002	4,012	5,850	6,964	6,371	6,000	35,652
Finnish.....	90	80	138	96	212	223	215	1,054
French.....	1,633	1,436	2,274	2,842	2,705	2,571	2,240	15,701
German.....	450	398	608	845	1,057	1,145	1,090	5,593
Greek.....	522	1,436	548	3,935	729	4,871	1,736	13,777
Hebrew.....	938	722	1,082	1,640	2,181	3,908	6,033	16,504

NUMBER OF ALIENS WHO WERE ADMITTED AND NUMBER WHO DEPARTED IN EACH MONTH, JANUARY TO JULY, 1920, BY RACES—Concluded.

Admitted—Concluded.

Race or people.	January.	February.	March.	April.	May.	June.	July.	Total.
Irish.....	1,309	1,003	1,408	2,534	3,298	3,555	4,031	17,198
Italian (north).....	1,231	1,253	1,212	1,266	1,613	1,795	2,715	11,095
Italian (south).....	10,085	8,496	10,926	9,873	11,250	8,868	13,181	72,679
Japanese.....	629	583	664	1,179	652	950	733	5,390
Korean.....	7	1	2	19	6	5	9	49
Lithuanian.....	27	35	32	48	38	20	41	241
Magyar.....	14	10	10	13	30	90	128	295
Mexican.....	4,658	4,555	5,819	5,084	3,730	4,905	4,241	32,992
Pacific Islander.....	4	1	1	.....	1	.....	3	10
Polish.....	183	133	221	275	413	427	663	2,315
Portuguese.....	240	1,636	2,193	1,850	1,488	3,486	2,964	13,857
Roumanian.....	56	35	91	103	134	207	193	819
Russian.....	155	173	206	204	174	221	228	1,361
Ruthenian (Russniak).....	25	8	27	40	26	37	21	184
Scandinavian (Norwegians, Danes, and Swedes).....	726	845	1,736	604	2,615	2,388	2,138	11,052
Scotch.....	1,379	1,336	1,590	2,260	2,582	2,279	2,422	13,848
Slovak.....	111	131	405	423	805	1,410	1,874	5,159
Spanish.....	1,626	1,212	2,071	3,403	4,966	5,201	3,730	22,209
Spanish-American.....	177	160	210	308	486	508	454	2,303
Syrian.....	98	80	158	410	627	1,236	599	3,217
Turkish.....	5	2	9	18	14	53	34	135
Welsh.....	91	59	93	143	179	202	165	932
West Indian (except Cuban).....	66	36	71	154	290	218	143	978
Other peoples.....	30	103	156	229	129	423	475	1,545
Total.....	31,858	30,606	39,971	48,214	53,772	62,602	62,832	320,950

Departed.

African (black).....	45	42	59	100	260	186	140	832
Armenian.....	75	69	112	31	37	81	39	444
Bohemian and Moravian.....	10	9	12	1	74	88	86	280
Bulgarian, Serbian, and Montenegrin.....	3,042	399	2,216	2,236	1,458	905	3,158	13,414
Chinese.....	180	286	148	148	375	246	257	1,640
Croatian and Slovenian.....	317	88	280	352	561	285	493	2,376
Cuban.....	143	63	61	131	111	171	186	866
Dalmatian, Bosnian, and Herzegovinian.....	236	248	206	327	76	104	176	1,373
Dutch and Flemish.....	414	186	104	301	103	267	222	1,597
East Indian.....	19	39	13	21	12	6	4	114
English.....	1,019	461	360	710	852	774	773	4,949
Finnish.....	24	134	55	79	137	220	87	736
French.....	350	105	428	684	514	428	554	3,063
German.....	364	426	285	185	431	1,070	485	3,246
Greek.....	2,019	206	2,460	251	1,824	417	1,490	8,676
Hebrew.....	22	18	14	13	39	73	61	230
Irish.....	255	103	47	316	267	376	279	1,643
Italian (north).....	634	124	183	340	342	370	1,041	3,034
Italian (south).....	7,235	1,481	2,673	3,363	1,540	3,192	5,848	25,532
Japanese.....	523	270	324	367	385	159	214	2,242
Korean.....	2	.....	.....	2	5	.....	.....	9
Lithuanian.....	7	.....	25	110	197	466	310	1,025
Magyar.....	2,901	1,868	2,577	1,828	1,883	1,897	2,631	15,585
Mexican.....	1,068	184	207	196	109	152	180	2,096
Pacific Islander.....	.....	.....	.....	.....	2	1	.....	3
Polish.....	675	2,511	3,761	3,248	1,465	4,252	3,269	19,181
Portuguese.....	139	100	98	120	64	478	310	1,309
Roumanian.....	2,552	482	3,330	771	670	1,385	1,250	10,440
Russian.....	132	20	31	60	171	451	333	1,198
Ruthenian (Russniak).....	10	42	30	112	240	233	121	788
Scandinavian (Norwegians, Danes, and Swedes).....	227	483	231	391	542	1,381	749	3,974
Scotch.....	146	75	62	169	243	164	281	1,140
Slovak.....	1,082	819	1,034	1,499	1,450	3,103	1,481	10,468
Spanish.....	506	84	274	365	346	660	477	2,712
Spanish-American.....	114	54	114	75	78	107	192	734
Syrian.....	49	11	45	43	69	88	109	414
Turkish.....	402	44	251	63	48	126	90	1,024
Welsh.....	23	5	1	12	20	15	21	97
West Indian (except Cuban).....	31	48	46	30	102	76	76	409
Other peoples.....	94	30	282	57	109	90	93	775
Total.....	27,086	11,607	22,639	19,107	17,121	24,543	27,565	149,668

The number of aliens admitted from January to July, 1920, classified by States of future permanent residence, was as follows:

ALIENS ADMITTED EACH MONTH FROM JANUARY TO JULY, 1920, SHOWING STATES OF FUTURE PERMANENT RESIDENCE.

State.	January.	February.	March.	April.	May.	June.	July.	Total.
Alabama.....	34	37	37	52	43	66	64	333
Alaska.....	13	9	8	7	17	14	6	74
Arizona.....	402	449	484	501	392	607	541	3,376
Arkansas.....	23	23	11	9	23	21	32	142
California.....	2,250	2,294	2,497	3,476	3,344	4,273	3,865	21,999
Colorado.....	127	114	144	175	183	176	224	1,143
Connecticut.....	877	944	1,383	1,841	2,033	2,394	2,236	11,708
Delaware.....	37	35	36	73	106	103	84	474
District of Columbia.....	136	85	100	164	111	189	131	916
Florida.....	421	352	327	326	425	437	355	2,643
Georgia.....	48	40	25	55	51	92	74	385
Hawaii.....	349	152	184	112	237	119	266	1,419
Idaho.....	105	123	176	169	162	163	132	1,020
Illinois.....	1,250	1,062	1,506	1,740	2,404	2,587	3,044	13,593
Indiana.....	158	161	194	360	372	485	412	2,142
Iowa.....	186	146	311	222	563	562	359	2,349
Kansas.....	92	47	69	101	83	98	99	589
Kentucky.....	16	6	18	29	48	34	36	187
Louisiana.....	96	129	182	139	199	156	215	1,116
Maine.....	337	277	496	827	738	633	621	3,929
Maryland.....	113	112	118	185	208	226	256	1,218
Massachusetts.....	2,391	2,599	3,909	5,351	4,971	7,074	6,025	32,320
Michigan.....	1,895	2,102	2,519	3,295	3,716	3,901	3,631	21,059
Minnesota.....	256	307	531	465	837	729	758	3,883
Mississippi.....	24	29	29	46	30	41	90	289
Missouri.....	178	159	210	229	224	281	305	1,586
Montana.....	96	67	142	148	245	218	164	1,080
Nebraska.....	83	117	184	172	163	215	205	1,139
Nevada.....	52	40	103	104	139	102	77	617
New Hampshire.....	179	206	296	468	412	455	348	2,364
New Jersey.....	1,355	1,418	1,790	1,883	2,347	2,688	3,001	14,482
New Mexico.....	88	66	113	99	58	86	104	614
New York.....	8,502	7,171	9,343	12,197	14,726	16,598	18,440	86,977
North Carolina.....	21	16	23	47	49	77	71	304
North Dakota.....	76	98	131	119	176	174	194	968
Ohio.....	1,023	1,081	1,485	2,088	2,293	3,229	3,000	14,204
Oklahoma.....	25	47	40	36	54	62	46	310
Oregon.....	253	238	376	404	406	424	402	2,503
Pennsylvania.....	2,215	2,233	2,730	3,236	4,590	4,754	5,215	24,973
Philippine Islands.....	8				1		1	10
Porto Rico.....	67	10	31	70	46	65	47	336
Rhode Island.....	432	484	812	836	850	1,230	1,225	5,869
South Carolina.....	17	11	13	22	37	44	53	197
South Dakota.....	65	52	130	68	192	154	123	784
Tennessee.....	14	44	15	44	42	32	37	228
Texas.....	3,764	3,744	4,686	3,731	2,720	3,453	3,071	25,209
Utah.....	52	85	111	266	121	232	172	1,039
Vermont.....	156	127	221	279	321	259	261	1,624
Virginia.....	154	153	179	243	341	368	419	1,857
Virgin Islands.....	4		2				1	7
Washington.....	836	844	871	857	1,085	1,265	1,205	6,963
West Virginia.....	204	189	202	352	237	352	401	1,917
Wisconsin.....	274	234	390	435	513	629	618	3,093
Wyoming.....	24	38	48	66	88	56	70	390
Total.....	31,858	30,606	39,971	48,219	53,772	62,692	62,832	329,950

Immigration Movement in the State of São Paulo, Brazil, 1919.

ACCORDING to the annual report of the Government of the State of São Paulo, Brazil,¹ 17,418 immigrants entered the State through the port of Santos. Of these 12,220 were "voluntary" immigrants and 5,198 were "subsidized" immigrants. It should be noted that all immigrants who are considered voluntary

¹ Quoted from Bollettino della Emigrazione. Rome, July, 1920. Vol. XIX, No. 7, p. 316.

immigrants by reason of the fact that they have made the journey to Santos at their own expense are entitled to a refund of their traveling expenses, provided that they go to work on the coffee plantations. It is reported that 4,394 immigrants, of whom 4,332 were voluntary immigrants, came to the State of São Paulo by rail. The statistics do not show the number of emigrants from the State, but their number must have been considerable, because all steamers leaving Santos and Buenos Aires for European ports carried a full list of steerage passengers.

The report refers also to unsuccessful attempts of recruiting labor in the State of Ceará. In this State the standstill of all agricultural work owing to persistent drought had resulted in an oversupply of labor of which the State of São Paulo wanted to avail itself for the coffee harvest. While contracts were being concluded there fell, however, abundant rain, which changed agricultural conditions in Ceará, and the government of this State dismissed the official labor agents of the State of São Paulo.

PUBLICATIONS RELATING TO LABOR.

Official—United States.

CALIFORNIA.—*Industrial Accident Commission. General lighting safety orders. Effective December 1, 1919. Sacramento, 1919. 63 pp.*

GEORGIA.—*State Board of Public Welfare. First annual report. Atlanta, 1920. 424 pp.*

Contains a digest of child welfare laws in Georgia, including those relating to child labor and apprenticeship. A summary of the general report is given on pages 186 to 188 of this issue of the REVIEW.

ILLINOIS.—*Department of Labor. Second annual report, July 1, 1918, to June 30, 1919, Springfield, 1920. 77 pp.*

Devoted principally to reports of the operations of the various free employment offices of the State, although in most instances no statistics are given. The inspector of private employment agencies reports a total of 366 complaints against these agencies and refunds of fees, etc., were given in 336 cases, the total amount of such refunds being \$2,289.82, or an average of \$6.81 for each complaint. A total of 72,397 inspections of 64,304 establishments employing 1,077,841 workers was made, and 4,617 violations of the child labor law were found. Violations of the woman's 10-hour law numbered 4,445. Activities of the Industrial Commission relating to the operation of the workmen's compensation law were noted in the MONTHLY LABOR REVIEW for June, 1920 (pp. 175, 176).

— (COOK COUNTY).—*Board of County Commissioners. Charity service reports, 1919. [Chicago, 1920.] 325 pp.*

Contains reports on poor relief, parents' pension fund, mothers' pensions, etc.

KANSAS.—*Department of Labor and Industry. The industrial directory of Kansas. Topeka, 1919. 147 pp.*

MASSACHUSETTS.—*Bureau of Immigration. Second annual report, 1918-19. Boston, 1920. 47 pp.*

Describes the bureau's work in protecting the immigrant from exploitation in establishing English classes in industrial plants and in Americanization.

— *Department of Labor and Industries. Conserving children in the industries of Massachusetts. Boston, 1920. 20 pp. Industrial Bulletin No. 15.*

A brief digest of this report will be found on pages 127 and 128 of this issue of the REVIEW.

— — *Division of Statistics. Nineteenth annual directory of labor organizations in Massachusetts, 1920. (Part I of the annual report on the statistics of labor for 1920.) Boston, 1920. 68 pp.*

NEBRASKA (OMAHA).—*Board of Public Welfare. Second annual report, Oct. 1, 1918, to Sept. 30, 1919. [Omaha, 1920] 83 pp.*

Reports activities of a free legal aid bureau, a municipal employment bureau, and includes special reports on woman workers in packing houses, department stores, and laundries, giving prevailing wages and conditions of labor, etc.

NEW YORK.—*Industrial Commission. Bureau of Women in Industry. The telephone industry. Albany, July, 1920. 95 pp. Special Bulletin, No. 100.*

A digest of this report is given on pages 117 to 122 of this issue of the MONTHLY LABOR REVIEW.

NEW YORK.—*Prison Survey Committee. Report. Albany, 1920. 412 pp.*

The report of the committee, appointed March 13, 1919, contains chapters on Prison industries and production, Attitude of organized labor, Wage and other incentives and compensation for industrial injuries, and Vocational training.

WASHINGTON.—*Bureau of Labor. Twelfth biennial report, 1919-1920. Olympia, 1920. 96 pp.*

Cost of living and Women and minors in industry are very briefly treated in this report. It is stated that strikes were very numerous in 1919 and 1920, a total of 105 being tabulated. The most important was the general strike in Seattle and Tacoma, February 6-11, 1919. A table gives hours and wages of union labor and the per cent idle in 1919. Reports on employment include reports of the Seattle Public Employment Office, United States Employment Office, and Veterans' Welfare Commission of the State of Washington.

WISCONSIN.—*Industrial Commission. Eighth annual report of the Citizens' Committee on Unemployment and the Public Employment Bureau of Milwaukee, July 1, 1919, to June 30, 1920. [Madison] September, 1920. 16 pp.*

— *Minimum wage act. [1913] [Madison, 1920.] 23 pp.*

Besides the text of the law this pamphlet contains orders, interpretations, and rulings of the commission.

— *Women's Department. Factory equipment, housekeeping and supervision. [Madison], 1920. 26 pp. Illustrated.*

A handbook for employers of women, containing the provisions of the statutes regarding labor standards and suggestions for improved equipment and housekeeping. The contents are grouped under the following heads: Hours of labor, Prohibited employments, Minimum wage, Safety, Sanitation, Equipment, and Housekeeping and supervision.

UNITED STATES.—*Department of Labor. Bureau of Labor Statistics. Union scale of wages and hours of labor, May 15, 1919. Washington, 1920. 281 pp. Bulletin 274. Wages and hours of labor series.*

This report contains the union scale of wages and hours of labor of 912,900 union members in the leading organized trades and occupations of 61 of the principal cities of the United States as of May 15, 1919. In all trades taken collectively there is reported an increase in weekly wage rates on May 15, 1919, over May 15, 1918, of 14 per cent; over 1916, of 39 per cent; over 1913, of 43 per cent; over 1910, of 55 per cent; and over 1907, of 62 per cent. A slight decrease in working time is noted, the regular hours of labor in 1919 being 2 per cent less than in 1918 and 4 per cent less than in 1916.

— *Bureau of Naturalization. Naturalization laws and regulations. Washington, September 24, 1920. 45 pp.*

— *Department of the Interior. Geological Survey. Coal in 1918. Part A. Production. By C. E. Leshner. Washington, May 28, 1920. Mineral Resources of the United States, 1918—Part II (p. 695-813).*

This report gives a brief review of the coal industry in 1918 (illustrated by charts) when the total amount produced was 579,385,820 tons of bituminous coal and lignite and 98,826,084 tons of Pennsylvania anthracite, representing an increase in bituminous coal and lignite of 27,595,257 tons and a decrease in anthracite of 785,727 tons as compared with 1917. One section is devoted to statistics of labor. In bituminous coal operations 615,305 men were employed, working an average of 249 days; in anthracite mining 147,121 men worked an average of 293 days. There are 304 possible working days in a year. In 1918 the bituminous coal production per man employed was 942 tons as compared with 915 in 1917; in anthracite mining each man employed produced 672 tons as compared with 646 in 1917. The production per man per day increased from 2.27 tons to 2.29 tons in anthracite mines and from 3.77 tons to 3.78 tons in bituminous mines. The 2.29 tons is the highest record in anthracite mines

since 1910; the highest in bituminous mines was 3.91 tons per man per day in 1915. The report records a total of 60,105 men on strike in bituminous mines with a total loss of 438,882 days, or an average of 7 per man. In anthracite mining the total number on strike during 1918 was 19,290 with a loss of 69,644 days, or an average of 4 days per man.

UNITED STATES.—*Department of the Interior, Bureau of Mines. Production of explosives in the United States, 1919. Washington, 1920. 31 pp. Technical paper 259.*

Contains also notes on coal-mine accidents due to explosives, and a list of permissible explosives tested up to May 31, 1920. The total number of fatalities to underground workers in coal mines, due to explosives, was 206 (92 killed in one explosion) in 1919 as compared with 135 in 1918. In the bituminous coal mines 57, or 3.41 per cent, of the fatalities were due to explosives. Other tables are on Number and percentage of fatalities due to explosives at metal mines and quarries in the United States, 1911-1918, and Fatal accidents in the mineral industry, 1918.

— *Treasury. Bureau of Internal Revenue. Child labor tax rulings. (Revised September, 1920.) Washington, 1920. 16 pp.*

Official—Foreign Countries.

AUSTRALIA.—*Department of the Treasury. Pensions and maternity allowance office. Invalid and old-age pensions. Statement for the 12 months ended 30th June, 1920. Melbourne, 1920. 10 pp.*

The report of the Australian office dealing with invalid and old-age pensions for the fiscal year 1919-20 shows that at the end of that year there were 99,170 (39,217 men and 59,953 women) old-age and 35,231 (16,501 men and 18,730 women) invalid pensioners for whom the total amount of pensions paid was £4,411,629 (\$21,469,192.53, par). In addition to this amount, £72,675 (\$353,672.89, par) was paid to benevolent asylums for the maintenance of pensioners, making a total expenditure of £4,484,304 (\$21,822,865.42, par). There were 12,705 old-age and 6,533 invalidity pensions granted during the year, an increase of 6,433 in the total number of pensions over the number in force at the end of the preceding year. The number of old-age pensioners for each 10,000 of population was 189 and of invalids 67.15, making a total of 256.15 persons receiving pensions out of each 10,000 persons. The maximum fortnightly pension rate is fixed at 30s. (\$7.30, par) and the average pension paid was £1 9s. 1.13d. (\$7.08, par). The average number of pensioners receiving the maximum amount was approximately 84 per cent for old-age and 92 per cent for invalidity. The total administrative costs for the year were £74,120 (\$360,704.98, par). Old-age pensions are payable to women at the age of 60 and to men at 65, or between the ages of 60 and 65 if permanently incapacitated for work.

— — — *Maternity allowances. Statement showing number of claims granted and rejected, expenditures, and cost of administration during the 12 months ended June 30, 1920. Melbourne, 1920. 3 pp.*

Allowances were granted during the year in 125,173 cases, the number of cases in which the claims were rejected being 621. The total amount paid to mothers was £625,865 (\$3,045,772, par), and the cost of administration was £12,785 (\$62,218, par), an average of £2 10d. (\$12.17, par) for each £100 (\$486.65, par) of maternity allowance paid.

— (QUEENSLAND).—*Government statistician. Statistics for 1918. In 10 parts and index. Brisbane, 1919.*

Part VII, Social statistics, contains tables concerning government relief, benevolent societies, and return of operations under The Workers' Dwellings Acts, 1909 to 1914.

— (SOUTH AUSTRALIA).—*Statistical Department. Statistical register, 1918-19. Adelaide, 1919. In 8 parts.*

Part 6 contains a table giving statistics of registered cooperative societies in the State for each year 1909 to 1918.

AUSTRALIA (TASMANIA).—*Industrial Department. Fifth annual report for 1919-20 on factories, wages, boards, shops, etc. Hobart, 1920. 33 pp. No. 21.*

Shows a total of 9,608 persons employed in factories, an increase of 1,047 from the preceding year. A table gives the number of male and female workers of each specified age employed in each specified kind of work, together with total earnings and maximum and minimum weekly wages.

BELGIUM.—*Ministère de l'industrie, du travail et du ravitaillement. La situation des industries Belges en Juin 1920. Bruxelles, 1920. 87 pp.*

This bulletin is the result of a study of industrial establishments in Belgium made with the purpose of gaining a view of the state of Belgian industry. The number employed in June, 1920, was found to be 92 per cent of the number of workers in June, 1913, although there had been a 76 per cent increase in employment over the number employed in December, 1919. Most of the information relates to establishments employing at least 20 persons.

BRAZIL (SÃO PAULO).—*Departamento Estadual do Trabalho. Boletim Nos. 34 e 35, Anno IX. 1920. São Paulo, 1920. 190 pp.*

Among the subjects discussed in this bulletin are Cost of living in the city of São Paulo, The eight-hour day, Workmen's compensation, and Wages. The provisions of the laws of various countries pertaining to the eight-hour day and to workmen's compensation are discussed with considerable detail.

— — *Seção de Informações. Accidentes no trabalho. Considerações sobre a aplicação de lei. São Paulo, 1920. 45 pp. Avulso No. 16.*

Discusses the administration of the workmen's compensation law in São Paulo, and in Spain, France, Chile, and Argentina.

— — — *Accidentes no trabalho. Jurisprudencia. Varias informações. São Paulo, 1920. 22, 14 pp. Nos. 14 and 15.*

These pamphlets contain decisions of the court concerning industrial accidents, resolutions of the legislature of the State of Rio de Janeiro, and other information concerning the administration of the workmen's compensation law.

CANADA (ONTARIO).—*Department of Agriculture. Statistical branch. Report, 1919. Toronto, 1920. 47 pp.*

One section of this report is entitled Labor, wages, and production.

— *Department of Labor. Vocational opportunities in the industries of Ontario. A survey. Garment making. Toronto, 1920. 29 pp. Bulletin No. 4.*

A summary of the four bulletins on vocational opportunities in Ontario appears on page 93 of this issue of the REVIEW. The three previous bulletins were listed in the September, 1920, REVIEW.

— *Department of Public Works. Trades and Labor Branch. Report, 1919. Toronto, 1920. 86 pp.*

Among the subjects covered in this report are Labor conditions in Ontario, Labor legislation in 1919, Government employment bureaus, Inspection of factories, shops, and office buildings, Inspection of labor agencies, Mothers' allowances, Vocational opportunities, and Course in employment management.

A decrease in the number of accidents is noted, 4,029 being reported in 1919, with 57 or 1.41 per cent, fatal, as compared with 4,907 in 1918, with 78 or 1.89 per cent, fatal. Mechanical causes were responsible for 20.43 per cent of the total number of accidents.

— (SASKATCHEWAN).—*Laws, statutes, etc. Some Saskatchewan legislation affecting women and children. Regina, 1920. 28 pp.*

Includes Children's protective act, Juvenile courts act, Mothers' pensions act, Factories act, Minimum wage act, Vocational training act, Town planning and rural development act, and Housing in urban municipalities.

CZECHOSLOVAKIA.—*Office de Statistique. Manuel statistique. Prague, 1920. 115 pp.*

Statistical information of the Republic in regard to population, number employed in principal industries, health service, education, agriculture, mines, industry and commerce, transportation, banks, insurance, and finances.

DENMARK (COPENHAGEN).—*Bureau de la Statistique. Annuaire statistique de Copenhague et Frédérikberg. 1919. København, 1920. 153 pp.*

Chapter VIII presents statistical tables of interest to labor, covering sick funds, industrial accidents, employment agencies, unemployment, wages, public employees, labor organizations, cost of living, and cooperative societies.

FINLAND.—*Socialstyrelsen. Arbetarskydd och arbetarvälfärd. Föredrag hållna vid föreläsningdagarna för kommunala yrkesinspektörer under Nov.-Dec. år 1919. Helsingfors, 1920. 168 pp. Sociala handböcker III.*

Labor protection and welfare. Addresses at conference of factory inspectors, November-December, 1919.

— — — *A. Olycksfallen i arbetet. Vol. 13; 1916. Helsingfors, 1920. 67 pp. Finlands officiella statistik. XXVI. Arbetsstatistik. A.*

Industrial accidents, covering the year 1916.

— — — *Yrkesinspektionen i Finland år 1918. Helsingfors, 1920. 86 pp., illus. Årsberättelser. Serie B. II.*

Statistical report on factory inspection for 1918.

FRANCE (PREFECTURE DE LA SEINE).—*Direction de l'hygiène, du travail et de la prévoyance sociale. Annuaire statistique de la ville de Paris. XXXV^e Année 1914 et principaux renseignements pour 1915. Paris, 1920. 695 pp.*

Annual statistics of the city of Paris for the year 1914, with principal returns for 1915.

GREAT BRITAIN.—*Department of Overseas Trade. Report on the postwar economic and industrial situation of Denmark. London, 1920. 38 pp. Cmd. 955.*

Contains a chapter on labor and social conditions which deals briefly with the cost of living, wages, unemployment, unemployment relief, hours of labor, and labor legislation. A statement of the provisions for unemployment relief taken from this report (p. 32) is given on pages 162 and 163 of this issue of the REVIEW.

— *Home Office. Annual report of the chief inspector of factories and workshops, 1919. London, 1920. 124 pp. Cmd. 941.*

This report includes chapters on safety, sanitation, industrial diseases, welfare in factories and workshops, employment, hours of work, night employment of young persons, joint industrial councils and trade boards, and a special report on twister's disability in the cotton trade, commonly known as twister's cramp. The inspector's report notes a recovery in the standard of sanitation and safety from the decline during the war. For the first time since 1914 statistical reports are included. An increase in the number of factories is recorded—12,396 more than in 1914, but a decrease of 8,060 in the number of workshops, resulting in a net increase of 4,336 establishments. Fatal accidents increased from 1,287 in 1914 to 1,385 in 1919, while the nonfatal accidents reported fell off from 158,585 to 124,632. It is believed, however, that these figures are not truly representative, possibly explained by the fact that "there has been great laxity in reports." The report includes a table giving the number of cases of each specified industrial disease from 1900 to 1919, inclusive. This table shows a total of 207 cases of lead poisoning and 57 cases of anthrax in 1919 out of a total of 279 cases tabulated. As compared with 1918 these figures represent, respectively, an increase of 63 cases of lead poisoning and a decrease of 15 cases of anthrax. It is announced that cases of epitheliomatous ulceration and chrome ulceration will hereafter be included in the tabulation. The prevailing work week in 1919 was 47 or 48 hours; in some cases 44 hours. The five-day week, it is stated, has been adopted fairly commonly in jute mills, bleaching and dyeing works, and many

other works not specified. "Reports show that the shortening of the work week has had a beneficial effect on the operatives, perhaps more so than any recent improvement in industrial conditions." As to the effect on production, "the reports disclose wide differences of experience," but on the whole a reduction in output seems to have resulted. In the chapter on night employment of young persons it is reported that in 1,036 establishments there were employed in 1919, 12,643 young persons under 16 years of age, 11,703 over 16 years of age, and 1,266 young persons, age not stated.

GREAT BRITAIN.—*Home Office. Miners' lamp committee. Record of research on the passage of the flame of an explosion through wire gauze. London, 1920. 16 pp. Memorandum No. 1.*

— — — *Seats for workers in factories and workshops. London, 1920. 16 pp. Welfare pamphlet No. 6.*

— — — *Chief inspector of mines. Mines and quarries: General report, with statistics, for 1919. Part I.—Divisional statistics and reports. London, 1920. 200 pp. Cmd. 925.*

This report shows that a total of 1,191,313 persons were employed in 2,943 coal mines in Great Britain and Ireland during the year 1919, a total of 21,661 employed in 495 metalliferous mines, and a total of 57,076 employed in 5,135 quarries. Altogether the number of persons employed in mines and quarries increased by 197,147 over the number employed during the preceding year. Children 16 years of age and under to the number of 83,444, or 6.6 per cent of the total number employed, were working in mines and quarries during 1919, according to this report. Statistics of accidents in mines and quarries will be found on page 133 of this issue of the REVIEW.

— *Ministry of Labor. Report on openings in industry suitable for disabled ex-service men. No. XXVI (revised). Vehicle building trade. London, 1920. 12 pp.*

— *Industrial Councils Division. Joint Industrial Councils Bulletin No. 3, September, 1920. A review of progress and achievements. [London, 1920.] 19 pp.*

Gives a list of 63 industries, including Government services, in which joint industrial councils have been set up, 7 of these councils, however, now being in suspension. The activity of the councils since December, 1919, when Bulletin No. 2 was issued, are given, showing the agreements negotiated affecting wages, hours, and holidays, and noting the work being done in research, organization, statistics, education, apprenticeship, and welfare, and the attitude of the councils toward unemployment insurance and workmen's compensation.

— — — *Training department. An explanation of the schemes for training disabled ex-service men in the building trades. [London, 1920.] 3 pp.*

— *Ministry of Transport. Report upon the accidents that have occurred on the railways of the United Kingdom and returns of accidents and casualties, 1919. London, 1920. 45 pp. Cmd. 962.*

This report is summarized on pages 133 and 134 of this issue of the REVIEW.

— *Privy Council. Medical research council. The science of ventilation and open-air treatment. Part II. London, 1920. 295 pp. Special report series, No. 52.*

Contains chapters on The chemical purity of the atmosphere in crowded confined places and in mines, Dust, Heat stagnation and fitness, Health and environment (including the effect of industrialism on women during the war), and Methods of ventilation and heating.

— *Registrar of friendly societies. Reports for the year ending December 31, 1918. Part A.—Appendix (C). London, 1920. x, 38 pp.*

This report contains statistical and other information relating principally to friendly societies, orders, and branches, workmen's compensation schemes, loan societies, and railway savings banks.

— *Treasury. Staffs employed in Government departments on September 1, 1920. London, 1920. 2 pp. Cmd. 981.*

LEAGUE OF NATIONS.—*International Labor Office. The dispute in the metal industry in Italy. Trade-union control of the industry. Geneva, September 24, 1920. 20 pp. Studies and reports, Series A, No. 2.*

An account of the dispute in the metal industry in Italy, compiled from various sources, appears on pages 197 to 206 of this issue of the MONTHLY LABOR REVIEW.

— *Secretariat. Currencies after the war. A survey of conditions in various countries. London, Harrison and Sons. [1920.] 254 pp.*

This is a study of the currency and banking conditions in part of the countries in Europe, Asia, and North and South America. It is stated that while it is incomplete and of different degrees of value the endeavor has been made to present an objective statement of facts on which future policy may be based, but not to criticize existing policies or suggest lines on which future policies should be built up.

NORWAY.—*Departementet for sociale saker. Arbeidstiden i anleggsog byggevirksohmeter, lager- og transportbedrifter, og i sten- og jordindustrien. * * * (Durée du travail dans les entreprises de construction et bâtiment, entrepôts et entreprises de transport et dans les industries de pierre et d'autres minéraux.) Kristiania, 1920. 58 pp. Norges offisielle statistikk. VI. 177.*

Hours of labor in the construction and building industries, in transportation and storage warehouses, and in stone and other mineral industries.

— *Kvinneres nattarbeide. * * * (Travail de nuit des femmes.) Kristiania, 1920. 56 pp. Norges offisielle statistikk. VI. 178.*

Report on night work of women in Norway.

— *Hovedstyret for statsbanene. Beretning for dret Huli 1918—30 Juni 1919. Kristiania, 1920. 292 pp.*

Annual statistical report of the State and privately owned railways of Norway for the year ending June, 1919. Tables dealing with accidents and with pension funds are of special interest to labor.

— *Riksforsikringsanstalten. Sykeforsikringen for årene 1916—1918. (Assurance-maladie pour les années 1916—1918.) Kristiania, 1920. 95 pp. Norges offisielle statistikk. VI. 174.*

Health insurance experience of Norway during the years 1916, 1917, and 1918.

SWEDEN.—*Socialstyrelsen. Arbetsinställelser i Sverige. 1918. Stockholm, 1920. 127 pp. Sveriges officiella statistik, Socialstatistik.*

The official report on strikes and lockouts in Sweden, 1918. During the year 708 strikes and lockouts occurred, affecting 61,223 workmen, and causing a loss of time of 1,436,409 hours. Of these conflicts 80 per cent were due to demands for wage increases. The largest number of strikes occurred in the building trades and affected 14,501 workmen, followed by those in the lumber and wood industries, which affected 10,122 workmen. Figures for the year 1917 and earlier years are given in the MONTHLY LABOR REVIEW for June, 1919 (p. 363).

SWITZERLAND.—*Caisse Nationale Suisse d'Assurance en cas d'Accidents. Rapport annuel et comptes pour l'exercice 1919. [Berne], 1920. 74 pp.*

Annual report of the Swiss National Accident Insurance Fund, which operates under Federal supervision. There was a total of 132,978 accidents reported for the fiscal year of 1919, of which number there were 109,086 industrial accidents, 312 being fatal.

UNION OF SOUTH AFRICA.—*Office of Census and Statistics. Official year book of the Union and of Basutoland, Bechuanaland Protectorate and Swaziland. No. 3 1919. Pretoria, 1920. 975 pp.*

Contains statistics mainly for the period 1910 to 1918. There is a section on labor and wages which sets forth the conditions of labor in the Union, the work of the Government labor bureaus in 1914 to 1919, weekly wages paid in certain occupations in 1913, statistics of trade-unions and of industrial disputes, and a review of industrial legislation. There is also a brief summary of the miners' phthisis act, 1919, giving

the scale of benefits allowed under its provisions and statistics of number and amount of benefits paid. Another section is devoted to prices, rents, and cost of living, with a summary of the report of the cost of living commission. A table shows the average wholesale prices of commodities, 1914 to 1919. In a chapter on mines appears a table showing the average and aggregate earnings and payments to white employees in coal mines, 1907 to 1918, and the average pay per shift to underground workers, 1913 to 1918. A table shows accidents and death rates for 1918, as follows:

ACCIDENTS AND DEATH RATES IN MINES IN THE UNION OF SOUTH AFRICA IN 1918.

Type of mine.	Total number of accidents.	Number of fatal accidents.	Total deaths.	Death rate per 1,000 per annum.
Metaliferous mines	2,065	428	534	2.43
Coal mines	228	48	51	1.00
Diamond mines	358	22	27	1.19
Alluvial diamond diggings	8	4	6	.....
Total	2,659	502	618	.....

There are also statistics on railway accidents, 1914 to 1918-19.

UNION OF SOUTH AFRICA.—*Social statistics. Statistics of retail and wholesale prices, rents, and cost of living. Pretoria, 1920. 89 pp.*

This is the second report on this subject to be issued, the first appearing in August, 1919.

Unofficial.

AMERICAN FEDERATION OF LABOR. *Report of the executive council to the fortieth annual convention, Montreal, Canada, June 7, 1920. [Washington, 1920.] 242 pp.*

An account of the Montreal convention of the American Federation of Labor was given in the MONTHLY LABOR REVIEW for August, 1920, pp. 168-171.

— *Utah Branch. Proceedings of sixteenth convention, Provo, September 13 to 15, 1920. [Salt Lake City] 1920. 48 pp.*

AMERICAN STATISTICAL ASSOCIATION. *Quarterly publications, new series, No. 131. (Vol. XVII). September, 1920. Concord, N. H., 1920. Pp. 235-380.*

Articles of great interest in this number are The classification of United States statistical employees, by Lewis Meriam; The measurement of labor productively, by F. Sargent Florence, and Control statistics of coal production and distribution, by F. G. Tryon. The article on the work of the reclassification commission shows why the commission did not confine itself to a program for a temporary realignment of salaries without attempting to strike at the root of the bad conditions existing, but instead attempted to devise a scheme broad enough in its scope to insure a permanent and equitable adjustment of salaries and map out a course for the future which would enable the Government service to hold out the promise of a 'satisfactory career to employees. Some of the conditions which need remedying are the lack of any general plan or attempt to place employees in positions for which they are best fitted, the opposition to transfers from one department to another due to the absence of a standard salary rate and the lack of regular standards for promotion. The difficulty of controlling lump-sum appropriations so that there shall not be abuses by paying salaries out of proportion to those paid for the same work in other departments, and also the difficulty of estimating many months in advance the exact service required, as is necessary under a statutory roll, was recognized by the commission, and met by formulation of a detailed precise set of specifications which would "give administrators that freedom which comes from a 'lump-sum' appropriation while it preserved to Congress that element of control that is characteristic of a statutory appropriation."

ANTHRACITE BOARD OF CONCILIATION. *Reports. Vols. 7-8: 1917-18 and 1918-19. Hazleton, Pa., 1918, 1919. 275, 117 pp.*

These volumes consist of compilations of the grievances formally presented and acted upon by the Anthracite Conciliation Board during the year beginning April 1, 1917, and ending March 31, 1918, and during the year following. One hundred and nineteen grievances were presented for adjudication during the year 1917-18, and 80 the following year. Data presented includes formal statements of complaint, the answering statement, and action taken by the board, including umpires' decisions.

BARNES, G. N. *The industrial section of the League of Nations. Oxford University Press, 1920. 16 pp. Barnett House Papers, No. 5.*

BERNHARDT, JOSHUA. *Government control of the sugar industry in the United States. An account of the work of the United States Food Administration and the United States Sugar Equalization Board (Inc.). New York, The Macmillan Co., 1920. x, 272 pp.*

This book, written by the chief of the statistical department of the United States Sugar Equalization Board, gives a detailed account of the work of the United States Food Administration and of the Sugar Board, embracing an attempt to show the manner in which mobilization of the sugar industry for war purposes was effected and how the restoration to prewar conditions was finally brought about in the face of extremely trying economic and political conditions. It tells how these two agencies controlled the sugar industry and trade during the war.

BLATCH, HARRIOT STANTON. *A woman's point of view. Some roads to peace. New York, The Womans Press, 1920. 179 pp.*

One chapter is entitled "Labor's road to peace." It is a discussion of labor's demand for a share in industry and may be summed up in the author's words. "It seems well within the range of possibility that dreary toil may rise to the level of a duty well performed, if the worker has full knowledge of the relation of his effort to the life about him and enjoys his fair weight in the direction of industrial affairs."

BLOOMFIELD, DANIEL. *Labor maintenance. A practical handbook of employees' service work. New York, The Ronald Press Co., 1920. 530 pp.*

This book presents examples of successful welfare work along all the different lines of such activities. Space is given also to the discussion of labor turnover and employment problems and their relation to other service work. The author makes a point of the failure of so-called "welfare," but at the same time cites the activities of many firms which have been conspicuously identified with this class of work.

BRERETON, M. A. CLOUDESLEY. *Continuative education under the Fisher Act. Points for employers. [London, 1920.] 44 pp.*

Contains also reprints of several papers on the subject of continuation schools.

BUDISH, J. M., AND SOULE, GEORGE. *The new unionism in the clothing industry. New York, Harcourt, Brace & Howe, 1920. 344 pp.*

The new unionism as outlined in this book is distinguished from the old by the tendency toward industrial rather than craft strikes and toward the socializing of industries. The unions in the clothing industry are the only ones, the writers state, which have consciously worked toward this end, and the book is an indorsement of the dissolution of the present economic system.

BURTON, MARGARET E. *Women workers in the Orient. Revised by E. I. M. Boyd. London, United Council for Missionary Education, 1920. 192 pp.*

One chapter is devoted to Women in industry. The effect of the introduction of modern machinery, factory work, hours and wages, and conditions of woman labor are discussed.

CASUALTY ACTUARIAL AND STATISTICAL SOCIETY OF AMERICA. *Proceedings, May 28, 1920. Lancaster, Pa., The New Era Printing Co., 1920. 436 pp.*

The address of the president on "The effect of the war upon the development of social insurance in this country" cites reasons for his belief that in spite of the high

cost of living the economic condition of wage earners in this country so definitely improved during the war that it has lessened the need for compulsory social insurance and that voluntary means for securing this protection have been greatly developed. The rapid growth of group insurance, especially since 1915, is believed to be indicative of the direction in which voluntary methods may be expected to grow. The total amount of insurance carried by employers at the end of 1919 is said to have amounted to more than a billion dollars and covered 1,350,000 employees. Other papers cover the technique of rate making, actuarial problems connected with the 1920 national revision of workmen's compensation insurance rates, an analysis of health claims, by disease, and notes on "Poisson's Exponential and Charlier's Curves."

CLEVELAND FOUNDATION. *A community recreation program. Cleveland [1920]. 116 pp. Cleveland recreation survey.*

— *The sphere of private agencies. Cleveland, 1920. 178 pp. Cleveland recreation survey.*

One chapter is devoted to recreation in industry, including recreational activities furnished by Cleveland firms.

COLLIS, EDGAR L., M. D. *The industrial clinic. A handbook dealing with health in work. London, John Bale, Sons and Danielsson (Ltd.), 1920, 248 pp.*

This book presents a summary of the experience in industrial medicine in England. It covers the medical and psychological aspects of the employment of workers, the consideration of industrial efficiency and fatigue, discussion of environmental and personal hygiene, emergency hospital and first-aid work, consideration of food values and food economy, and the employment of women. Much of the material gathered by Government agencies in the past 10 years is included in the report.

DELEMER, ADOLPHE. *D'Une organisation du travail intellectuel. Paris, Editions Bossard, 1920. 60 pp.*

An argument against individualism and for organization of intellectual workers as a part of the general labor organization.

DRACHSLER, JULIUS. *Democracy and assimilation. The blending of immigrant heritages in America. New York, The Macmillan Co., 1920. 275 pp.*

A comprehensive study of the problems and methods of assimilation and Americanization in this country.

DYKEMA, FRANK L. *Americanization dictionary, defining naturalization terms and processes for the American who desires to help the alien become a citizen. Grand Rapids, 1920. 63 pp.*

EMMOTT, LORD. *Nationalization of industries. A criticism. London, T. Fisher Unwin (Ltd.), 1920. 78 pp.*

The author presents with great clearness his reasons for believing that nationalization of industries will not have the satisfactory results claimed by supporters of this theory. He contrasts the two methods of conducting business, the necessity for quick decisions, initiative, and resourcefulness which are developed in private management, and the absolute necessity for a large amount of red tape in State-owned enterprise, the domination of special interests which it is impossible to escape and the lack of business training which would develop the most able leaders. The writer believes that greater scope must be given to the abilities of the workers but that the logical development lies in profit sharing and a greater share in the management rather than in a complete change in the economic system.

FURNISS, EDGAR S. *The position of the laborer in a system of nationalism. A study in the labor theories of the late English mercantilists. New York, Houghton Mifflin Co., 1920. 260 pp.*

Prompted by the trend toward nationalism resulting from the war, the author has made an intensive study of that phase of the economic theories which have been termed "mercantilism" as it is illustrated in "the reaction of nationalism upon the class relationships and the life conditions of the people within the nation. It deals

primarily with the position of the laborer in the economic organization of the country; with a formulation of his rights and duties; with a statement of the principles which should govern his standard of living; and, to a smaller extent, with a discussion of how much his wages will, or ought to, be."

GALLIVER, GEORGE A. *Industrial cooperation. A new renaissance.* [1920.] 21 pp.

A paper read before the annual convention of the United Typothetae of America, at St. Louis, Mo., September 13-15, 1920.

GENERAL CONFERENCE OF UNITARIAN AND OTHER CHRISTIAN CHURCHES. *Commission on social reconstruction. Report. The aims of social reconstruction.* 1920. 8 pp.

HANATOUX, GABRIEL. *La démocratie et le travail.* Paris, Ernest Flammarion, Editeur, 1920. 264 pp.

This is a review of French socialism, its aims and methods, showing reasons for its failures and why revolutionary socialism can not hope to succeed although the author believes that organization offers the indispensable medium for future social combinations.

HINDUS, MAURICE G. *The Russian peasant and the revolution.* New York, Henry Holt and Co., 1920. 327 pp.

A study of the Russian revolution, particularly in relation to the part the Russian peasant has had in its making and the part he will play in the future of the country.

INSTITUT INTERNATIONAL DE STATISTIQUE. *Annuaire international de Statistique.* Vol. VII. La Haye, 1920. 283 pp.

This volume covers statistical information from different countries relative to agriculture; posts, telegraphs, and telephones; joint-stock companies, banks, etc.; cooperative societies; housing; and wholesale prices.

INSURANCE YEAR BOOK, 1920-21. *Forty-eighth annual issue. Life, casualty and miscellaneous; Fire and marine.* Corrected to June 20, 1920. New York, the Spectator Co., 1920. 624, A-456, B-276, lii; 512, B-286, C-484, lii pp.

The volume on Life, casualty, and miscellaneous insurance contains data referring to industrial insurance, workmen's compensation, and labor laws.

KELLY, ROY WILLMARTH. *Training industrial workers.* New York, The Ronald Press Co., 1920. 437 pp.

This book presents a survey of the types of the most important schools and classes for vocational education and points out as far as possible the scope of the education which should be discharged by the Federal, State, and local governments, and what might be considered a reasonable division of responsibility between the public agency and private enterprise. The book can be of service to educational directors and personnel managers, to owners and managers, and to all who are interested in economic, social, and civic progress.

KERLIN, ROBERT T. *The voice of the Negro.* New York, E. P. Dutton & Co., 1919. 188 pp.

This book is composed of extracts from the Negro press, with only sufficient comment by Prof. Kerlin, of the Virginia Military Institute, to explain their arrangement and the extent to which a given extract is typical as reflecting the attitude of the Negroes themselves toward the situation created in 1919 by the race riots which occurred in Washington and elsewhere. The extracts are confined exclusively to the relations of the two races, no attention being paid to the Negro press as a news gatherer, or as a means of culture and general information.

The chapter headings give a fair idea of the ground covered: The colored press; the new era; the Negro's reactions to the World War; the Negro's grievances and demands; riots; lynchings; the South and the Negro; the Negro and labor unionism and bolshevism; Negro progress; the lyric cry.

The desires of the Negro as revealed by his press are not particularly revolutionary. They want fair treatment in the courts; they want the abolition of lynching; they

want schools for their children; they want reasonable accommodation when traveling, and decent housing when staying at home; they want a sentiment against miscegenation which will prevent the white man from looking upon colored women as fair prey; and they object to discrimination against them in the economic and industrial fields. Of a desire for social intermingling with the whites, Prof. Kerlin finds little indication, but he finds much evidence of a growing racial consciousness and of an increasing belief that submission is a mistaken policy. In general, the colored press approves highly of the racial committees of white and colored men formed in various States to discuss and improve relations between the races.

KLEIN, PHILIP. *Prison methods in New York State*. New York, 1920. 420 pp. *Columbia University studies in history, economics, and public law*, Vol. XC, No. 1. Whole number 205.

Contains two chapters on prison labor.

LABOR COPARTNERSHIP ASSOCIATION. *Report of annual meeting, 1920*. London, 6 Bloomsbury Square, 1920. 32 pp.

This pamphlet contains the text of the speeches made at the annual meeting of the association.

— *Thirty-fourth report, for 1919*. London, 6 Bloomsbury Square, 1920. 48 pp.

This report gives particulars of developments in individual profit-sharing schemes, in stock ownership, and agricultural copartnership. Statistics are given of workmen's copartnership societies and a résumé of the report by the Ministry of Labor on profit sharing and labor copartnership.

LEY, FRED T., & Co (INC.). *Home building for wage earners. A financial and economic problem*. New York, The Cheltenham Press, 1920. 56 pp. Illustrated.

Some of the subjects discussed are Labor shortage, Reason for housing shortage, The new competition for labor, Company houses, What is a fair rent, Rental or sale, Methods of selling, Copartnership housing, and Planning the village.

MEAD, ELWOOD. *How California is helping people own farms and rural homes*. [Berkeley] 1920. 28 pp. *University of California agricultural experiment station circular No. 221*.

Explains how the State is carrying out the provisions of the land settlement act of 1917. This policy, it is stated, gives added political and social strength to the State and helps reduce the cost of living.

MENDELSON, SIGMUND. *Labor's crisis. An employer's view of labor problems*. New York, The MacMillan Co., 1920. 171 pp.

This book is a general discussion of labor problems from the viewpoint of one having practical experience in dealing with them. The author believes that the material advancement in the condition of labor is not a product of present economic conditions but that it is a result of public sentiment which had been slowly working toward shorter hours, improved working and living conditions, and abolition of child labor. He thinks, however, we can not expect industrial expansion and prosperity unless labor can be stimulated to greater efforts and that otherwise violent economic reactions resulting in industrial recession and a generally lowered standard of living are inevitable.

NATIONAL CHILD LABOR COMMITTEE. *The American child*. Vol. II, No. 2. New York, 105 East Twenty-second Street, August, 1920. pp. 103-191.

Besides editorial and news notes on matters relating to child labor, this issue contains the report and papers of the fifteenth national conference on child labor, held at New Orleans, April 15, 1920. Among the papers are the following: Psychological aspects of the child labor problem, The juvenile court and child labor, and Health protection for working children. The writer of the last-named paper holds that physical examinations under present methods of administration have a very limited value because the physical standards are so low and no attempt at follow-up work is

made. Adequate results can be obtained only by having capable executives, with discretionary power, to issue the employment certificates and look after the health of each individual child in industry. It was advocated by one of the speakers that the next step to be taken by this committee should be to give its careful attention to child labor on the farms, a matter which has hitherto been greatly neglected.

NATIONAL CONSUMERS' LEAGUE. *The high cost of living and the 10 years' program, 1920-1930.* 44 East Twenty-third Street, New York, 1920. 8 pp.

Sets forth briefly the general program of the league, which intends during the next 10 years to concentrate its efforts along the line of (1) honest products for all, (2) enlightened industrial standards, (3) legal defense of labor laws, (4) protection against industrial poisons, (5) compulsory health insurance, (6) cooperative production and distribution, and (7) making the facts known.

NATIONAL COUNCIL OF SOCIAL SERVICE (Great Britain). *Public services.* London, 8a, New Cavendish Street, W. 1, 1920. 96 pp. *Handbooks of information on social service.*

A revision and enlargement of a pamphlet first issued in 1917 by the Joint Committee on Social Service. Contains chapters on National health insurance, Poor law, Old-age pension, and Industry and employment.

NATIONAL FEDERATION OF REMEDIAL LOAN ASSOCIATIONS. *Proceedings of twelfth annual convention, Newark, N. J., June 17-19, 1920.* Detroit, 708 Breitmeyer Building, 1920. 46 pp.

— *Work of the remedial loan societies, 1919-20.* [Detroit, 1920] 1 table.

NATIONAL INDUSTRIAL CONFERENCE BOARD. *Changes in the cost of living, July, 1914-July, 1920.* New York. September, 1920. 28 pp. *Research report No. 30.*

This report is the seventh in a series of studies of changes in the cost of living among wage earners in the United States. Between July, 1914, and July, 1920, it is stated, the cost of living advanced 104.5 per cent, the increase between March and July, 1920, being 5 per cent, and between July, 1919, and July, 1920, nearly 19 per cent. The greatest increase in the three months' period mentioned was for fuel and light, 11.5 per cent. Food was next, with an increase of 9.5 per cent, while clothing decreased 4 per cent. During the year July, 1919, to July, 1920, inclusive, the increase averaged 18.8 per cent, clothing showing the greatest advance, 33 per cent, and shelter next, with 23 per cent. The following table shows the per cent of increase of budget items in the six years between July, 1914, and July, 1920.

PER CENT OF INCREASE IN COST OF LIVING IN JULY, 1920, OVER JULY, 1914, BY SEPARATE BUDGET ITEMS.

Budget item.	Relative importance in family budget.	Per cent of increase in cost, July, 1920, over July, 1914.	Per cent of increase as related to total budget.
Food.....	43.1	119	51.3
Shelter.....	17.7	58	10.3
Clothing.....	13.2	166	21.9
Fuel and light.....	5.6	66	3.7
Sundries.....	20.4	85	17.3
All items.....	100.0	.....	104.5

— *The cost of living among wage earners, Cincinnati, Ohio, May, 1920.* New York, 10 East Thirty-ninth Street, July, 1920. 18 pp. *Special report No. 13.*

This study is based on reports of family budgets collected by other agencies and on an investigation covering several weeks in May, 1920. The report of this investigation shows that the cost of living averaged \$1,204.28 a year for a family of three,

\$1,486.09 for a family of four, \$1,692.50 for a family of five, and \$1,898.91 for a family of six. The minimum cost of living for an unmarried man averaged \$1,037.20 a year. The report states that the cost of living increased 89 per cent in Cincinnati between May, 1914, and May, 1920.

NATIONAL INDUSTRIAL CONFERENCE BOARD.—*Unwarranted conclusions regarding the eight-hour and ten-hour workday. New York, 10 East Thirty-ninth Street, August, 1920. 21 pp. Special report No. 14.*

An attempt to show that the conclusions regarding the eight-hour and ten-hour workday as set forth in Bulletin No. 106 of the United States Public Health Service; entitled "Comparison of an eight-hour plant and a ten-hour plant," are unscientific, unwarranted, and misleading."

NATIONAL SAFETY COUNCIL. *Safe practices. No. 38. Safety bulletins and bulletin boards. Chicago, 168 North Michigan Avenue, 1920. 15 pp. Illustrated.*

— *Safe practices. No. 39. Machine shop machinery. Chicago, 168 North Michigan Avenue, 1920. 16 pp. Illustrated.*

NEDERLANDSCHE VEREENIGING VOOR WETTELIJKE BESCHERMING DER ARBEIDERS. *Jaarverslag uitgebracht aan de algemeene ledenvergadering 2 October 1920. [Amsterdam, 1920.] 52 pp.*

Report of the Dutch section of the International Association for Labor Legislation, Is. P. de Vooy, secretary.

SNOWDEN, PHILIP. *Labor and national finance. London, Leonard Parsons, Ltd., 1920. 160 pp.*

This book discusses the financial condition of Great Britain as a result of the war and criticizes the policy of the Government in failing to impose a levy on capital and for its policy of indirect taxation. It outlines a financial policy which would be acceptable to labor.

SOCIÉTÉ INTERNATIONALE POUR L'ÉTUDE DES QUESTIONS D'ASSISTANCE. *Législation française en vigueur sur l'assistance et la bienfaisance. Recueil de textes (Lois, décrets, modèles de règlements). Tome II. (Suppléments au tome 1^{er}.) Paris, 1920. 488 pp.*

A collection of laws and decrees relating to protection and relief, from 1810 to 1920, including aid for charitable institutions; protection of children and young persons; pensions for old age, disability, and for large families; hospitals for the old, incurable, tuberculous and war victims; free medical assistance, etc.

TEXTILE WORLD JOURNAL (compiler). *American directory of the knitting trade in the United States and Canada, 1920. New York, Bragdon, Lord & Nagle Co. (Inc.), 1920. 811 pp.*

THOMPSON, FRANK V. *Schooling of the immigrant. New York, Harper & Bros., 1920. 408 pp. Carnegie Corporation of New York, Americanization studies.*

A comprehensive survey of present-day problems, policies, and results in immigrant education, and its relation to the making of good citizens.

WARNE, FRANK JULIAN. *The workers at war. New York, The Century Co., 1920. 250 pp.*

The author gives an account of industrial conditions during the war, including the Mooney case and the Bisbee deportations; the attitude of the Government toward labor, quoting from many of President Wilson's speeches, and outlining the work of the various governmental agencies created to deal with labor; accomplishments in war manufactures, and plans for future industrial relations such as the Plumb plan. Organization of consumers affiliated with the trade-union organizations is advocated.

WEAVER, E. W. *Occupational fitness and promise. New York, United Y. M. C. A. Schools Home Study Division, 1920. 27 pp.*

— *The distribution of labor recruits. New York, United Y. M. C. A. Schools Home Study Division, 1920. 23 pp.*

WILLIAMS, ROBERT. *The soviet system at work.* London, National Labor Press, (Ltd.), 1920. 27 pp.

WILLIAMS, WHITING. *What's on the worker's mind.* New York, Charles Scribner's Sons, 1920. 329 pp.

An account of the writer's experiences in seeking jobs at the time following the war when there was general business depression, and of the impressions received in his intimate contact with various grades of workers. He concludes as a result of his experience that socialism does not offer any solution, but that improvement must come from a keener and more sympathetic insight into the working of the present system.

SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS

[The publication of the annual and special reports and of the bimonthly bulletin was discontinued in July, 1912, and since that time a bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These bulletins are numbered consecutively beginning with No. 101, and up to No. 236 they also carry consecutive numbers under each series. Beginning with No. 237 the serial numbering has been discontinued. A list of the series is given below. Under each is grouped all the bulletins which contain material relating to the subject matter of that series. A list of the reports and bulletins of the bureau issued prior to July 1, 1912, will be furnished on application. The bulletins marked thus * are out of print.]

Wholesale Prices.

- * Bul. 114. Wholesale prices, 1890 to 1912.
- Bul. 149. Wholesale prices, 1890 to 1913.
- * Bul. 173. Index numbers of wholesale prices in the United States and foreign countries.
- Bul. 181. Wholesale prices, 1890 to 1914.
- * Bul. 200. Wholesale prices, 1890 to 1915.
- Bul. 226. Wholesale prices, 1890 to 1916.
- Bul. 269. Wholesale prices, 1890 to 1919. [In press.]

Retail Prices and Cost of Living.

- * Bul. 105. Retail prices, 1890 to 1911: Part I.
Retail prices, 1890 to 1911: Part II—General tables.
- * Bul. 106. Retail prices, 1890 to June, 1912: Part I.
Retail prices, 1890 to June, 1912: Part II—General tables.
- Bul. 108. Retail prices, 1890 to August, 1912.
- Bul. 110. Retail prices, 1890 to October, 1912.
- Bul. 113. Retail prices, 1890 to December, 1912.
- Bul. 115. Retail prices, 1890 to February, 1913.
- * Bul. 121. Sugar prices, from refiner to consumer.
- Bul. 125. Retail prices, 1890 to April, 1913.
- * Bul. 130. Wheat and flour prices, from farmer to consumer.
- Bul. 132. Retail prices, 1890 to June, 1913.
- Bul. 136. Retail prices, 1890 to August, 1913.
- Bul. 138. Retail prices, 1890 to October, 1913.
- * Bul. 140. Retail prices, 1890 to December, 1913.
- Bul. 156. Retail prices, 1907 to December, 1914.
- Bul. 164. Butter prices, from producer to consumer.
- Bul. 170. Foreign food prices as affected by the war.
- Bul. 184. Retail prices, 1907 to June, 1915.
- Bul. 197. Retail prices, 1907 to December, 1915.
- Bul. 228. Retail prices, 1907 to December, 1916.
- Bul. 270. Retail prices, 1913 to 1919. [In press.]

Wages and Hours of Labor.

- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- * Bul. 118. Ten-hour maximum working-day for women and young persons.
- Bul. 119. Working hours of women in the pea canneries of Wisconsin.
- * Bul. 128. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912.
- * Bul. 129. Wages and hours of labor in the lumber millwork, and furniture industries, 1890 to 1912.
- * Bul. 131. Union scale of wages and hours of labor, 1907 to 1912.
- * Bul. 134. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912.
- * Bul. 135. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912.
- Bul. 137. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912.

Wages and Hours of Labor—Concluded.

- Bul. 143. Union scale of wages and hours of labor, May 15, 1913.
- Bul. 146. Wages and regularity of employment in the dress and waist industry of New York City.
- * Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.
- * Bul. 150. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1913.
- Bul. 151. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1912.
- Bul. 153. Wages and hours of labor in the lumber, millwork, and furniture industries, 1907 to 1913.
- Bul. 154. Wages and hours of labor in the boot and shoe and hosiery and underwear industries, 1907 to 1913.
- Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
- Bul. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- Bul. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- Bul. 168. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1913.
- Bul. 171. Union scale of wages and hours of labor, May 1, 1914.
- Bul. 177. Wages and hours of labor in the hosiery and underwear industry, 1907 to 1914.
- Bul. 178. Wages and hours of labor in the boot and shoe industry, 1907 to 1914.
- Bul. 187. Wages and hours of labor in the men's clothing industry, 1911 to 1914.
- * Bul. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
- * Bul. 194. Union scale of wages and hours of labor, May 1, 1915.
- Bul. 204. Street railway employment in the United States.
- Bul. 214. Union scale of wages and hours of labor, May 15, 1916.
- Bul. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
- Bul. 232. Wages and hours of labor in the boot and shoe industry, 1907 to 1916.
- Bul. 238. Wages and hours of labor in woolen and worsted goods manufacturing, 1916.
- Bul. 239. Wages and hours of labor in cotton goods manufacturing and finishing, 1916.
- Bul. 245. Union scale of wages and hours of labor, May 15, 1917.
- Bul. 252. Wages and hours of labor in slaughtering and meat-packing industry.
- Bul. 259. Union scale of wages and hours of labor, May 15, 1918.
- Bul. 260. Wages and hours of labor in the boot and shoe industry, 1907 to 1918.
- Bul. 261. Wages and hours of labor in woolen and worsted goods manufacturing, 1918.
- Bul. 262. Wages and hours of labor in cotton goods manufacturing and finishing, 1918.
- Bul. 265. Industrial survey in selected industries in the United States, 1919. Preliminary report.
- Bul. 274. Union scale of wages and hours of labor, May 15, 1919.
- Bul. 278. Wages and hours of labor in the boot and shoe industry, 1907-1920.

Employment and Unemployment.

- * Bul. 109. Statistics of unemployment and the work of employment offices in the United States.
- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- Bul. 172. Unemployment in New York City, N. Y.
- Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
- * Bul. 183. Regularity of employment in the women's ready-to-wear garment industries.
- Bul. 192. Proceedings of the American Association of Public Employment Offices.
- * Bul. 195. Unemployment in the United States.
- Bul. 196. Proceedings of the Employment Managers' Conference held at Minneapolis, January, 1916.
- Bul. 202. Proceedings of the conference of the Employment Managers' Association of Boston, Mass., held May 10, 1916.

Employment and Unemployment—Concluded.

- Bul. 206. The British system of labor exchanges.
- * Bul. 220. Proceedings of the Fourth Annual Meeting of the American Association of Public Employment Offices, Buffalo, N. Y., July 20 and 21, 1916.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- * Bul. 227. Proceedings of the Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- Bul. 235. Employment system of the Lake Carriers' Association.
- Bul. 241. Public employment offices in the United States.
- Bul. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.

Women in Industry.

- Bul. 116. Hours, earnings, and duration of employment of wage earning women in selected industries in the District of Columbia.
- * Bul. 117. Prohibition of night work of young persons.
- * Bul. 118. Ten-hour maximum working-day for women and young persons.
- Bul. 119. Working hours of women in the pea canneries of Wisconsin.
- * Bul. 122. Employment of women in power laundries in Milwaukee.
- Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
- * Bul. 167. Minimum-wage legislation in the United States and foreign countries.
- * Bul. 175. Summary of the report on condition of woman and child wage earners in the United States.
- * Bul. 176. Effect of minimum-wage determinations in Oregon.
- * Bul. 180. The boot and shoe industry in Massachusetts as a vocation for women.
- Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
- Bul. 193. Dressmaking as a trade for women in Massachusetts.
- Bul. 215. Industrial experience of trade-school girls in Massachusetts.
- Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- Bul. 253. Women in the lead industry.

Workmen's Insurance and Compensation (including laws relating thereto).

- Bul. 101. Care of tuberculous wage earners in Germany.
- Bul. 102. British National Insurance Act, 1911.
- Bul. 103. Sickness and accident insurance law of Switzerland.
- Bul. 107. Law relating to insurance of salaried employees in Germany.
- * Bul. 126. Workmen's compensation laws of the United States and foreign countries.
- * Bul. 155. Compensation for accidents to employees of the United States.
- * Bul. 185. Compensation legislation of 1914 and 1915.
- Bul. 203. Workmen's compensation laws of the United States and foreign countries.
- Bul. 210. Proceedings of the Third Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions.
- Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
- Bul. 240. Comparison of workmen's compensation laws of the United States.
- Bul. 243. Workmen's compensation legislation in the United States and foreign countries.
- Bul. 248. Proceedings of the Fourth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 264. Proceedings of the Fifth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 272. Workmen's compensation legislation of the United States and Canada, 1919. [In press.]
- Bul. 273. Proceedings of the Sixth Annual Meeting of the International Association of Industrial Accident Boards and Commissions. [In press.]
- Bul. 275. Comparison of workmen's compensation laws of the United States and Canada.

Industrial Accidents and Hygiene.

- Bul. 104. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories.

Industrial Accidents and Hygiene—Concluded.

- Bul. 120. Hygiene of the painters' trade.
- * Bul. 127. Dangers to workers from dusts and fumes, and methods of protection.
- Bul. 141. Lead poisoning in the smelting and refining of lead.
- * Bul. 157. Industrial accident statistics.
- Bul. 165. Lead poisoning in the manufacture of storage batteries.
- * Bul. 179. Industrial poisons used in the rubber industry.
- Bul. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings.
- * Bul. 201. Report of committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. [Limited edition.]
- Bul. 205. Anthrax as an occupational disease.
- Bul. 207. Causes of death by occupation.
- Bul. 209. Hygiene of the printing trades.
- * Bul. 216. Accidents and accident prevention in machine building.
- Bul. 219. Industrial poisons used or produced in the manufacture of explosives.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 230. Industrial efficiency and fatigue in British munition factories.
- Bul. 231. Mortality from respiratory diseases in dusty trades.
- Bul. 234. Safety movement in the iron and steel industry, 1907 to 1917.
- Bul. 236. Effect of the air hammer on the hands of stonecutters.
- Bul. 251. Preventable death in the cotton manufacturing industry.
- Bul. 253. Women in the lead industry.
- Bul. 256. Accidents and accident prevention in machine building. Revision of Bul. 216.
- Bul. 267. Anthrax as an occupational disease. (Revised edition.)
- Bul. 276. Standardization of industrial accident statistics. [In press.]

Conciliation and Arbitration (including strikes and lockouts).

- * Bul. 124. Conciliation and arbitration in the building trades of Greater New York.
- Bul. 138. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements.
- Bul. 139. Michigan copper district strike.
- Bul. 144. Industrial court of the cloak, suit, and skirt industry of New York City.
- Bul. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City.
- Bul. 191. Collective bargaining in the anthracite coal industry.
- Bul. 198. Collective agreements in the men's clothing industry.
- Bul. 233. Operation of the Industrial Disputes Investigation Act of Canada.

Labor Laws of the United States (including decisions of courts relating to labor).

- * Bul. 111. Labor legislation of 1912.
- Bul. 112. Decisions of courts and opinions affecting labor, 1912.
- * Bul. 148. Labor laws of the United States, with decisions of courts relating thereto.
- * Bul. 152. Decisions of courts and opinions affecting labor, 1912.
- * Bul. 166. Labor legislation of 1914.
- * Bul. 169. Decisions of courts affecting labor, 1914.
- * Bul. 186. Labor legislation of 1915.
- * Bul. 189. Decisions of courts affecting labor, 1915.
- Bul. 211. Labor laws and their administration in the Pacific States.
- * Bul. 213. Labor legislation of 1916.
- Bul. 224. Decisions of courts affecting labor, 1916.
- Bul. 229. Wage-payment legislation in the United States.
- Bul. 244. Labor legislation of 1917.
- Bul. 246. Decisions of courts affecting labor, 1917.
- Bul. 257. Labor legislation of 1918.
- Bul. 258. Decisions of courts and opinions affecting labor, 1918.
- Bul. 277. Labor legislation of 1919. [In press.]

Foreign Labor Laws.

- Bul. 142. Administration of labor laws and factory inspection in certain European countries.

Vocational Education.

- Bul. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City.
- * Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.
- Bul. 159. Short-unit courses for wage earners, and a factory school experiment.
- Bul. 162. Vocational education survey of Richmond, Va.
- Bul. 199. Vocational education survey of Minneapolis.

Labor as Affected by the War.

- Bul. 170. Foreign food prices as affected by the war.
- Bul. 219. Industrial poisons used or produced in the manufacture of explosives.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 222. Welfare work in British munition factories.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- Bul. 230. Industrial efficiency and fatigue in British munition factories.
- Bul. 237. Industrial unrest in Great Britain.
- Bul. 249. Industrial health and efficiency. Final report of British Health of Munition Workers Committee.
- Bul. 255. Joint standing industrial councils in Great Britain.

Miscellaneous Series.

- *Bul. 117. Prohibition of night work of young persons.
- *Bul. 118. Ten-hour maximum working-day for women and young persons.
- *Bul. 123. Employers' welfare work.
- Bul. 158. Government aid to home owning and housing of working people in foreign countries.
- Bul. 159. Short-unit courses for wage earners, and a factory school experiment.
- * Bul. 167. Minimum-wage legislation in the United States and foreign countries.
- Bul. 170. Foreign food prices as affected by the war.
- Bul. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
- Bul. 208. Profit sharing in the United States.
- Bul. 222. Welfare work in British munition factories.
- Bul. 242. Food situation in Central Europe, 1917.
- Bul. 250. Welfare work for employees in industrial establishments in the United States.
- Bul. 254. International labor legislation and the society of nations.
- Bul. 263. Housing by employers in the United States [In press.]
- Bul. 266. Proceedings of the seventh annual convention of the Association of Governmental Labor Officials of the United States and Canada. [In press.]
- Bul. 268. Historical survey of international action affecting labor.
- Bul. 271. Adult working-class education in Great Britain and the United States.

SPECIAL PUBLICATIONS ISSUED BY THE BUREAU OF LABOR STATISTICS

Descriptions of occupations, prepared for the United States Employment Service, 1918-19.

Boots and shoes, harness and saddlery, and tanning.

Cane-sugar refining and flour milling.

Coal and water gas, paint and varnish, paper, printing trades, and rubber goods.

Electrical manufacturing, distribution, and maintenance.

Logging camps and sawmills.

Medicinal manufacturing.

Metal working, building and general construction, railroad transportation, and ship-building.

Mines and mining.

Office employees.

Slaughtering and meat packing.

Street railways.

Textiles and clothing.

Water transportation.



S

.